

PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY OPERATING PERMIT NUMBER 2026



ASARCO, LLC
MISSION COMPLEX
4201 WEST PIMA MINE ROAD
SAHUARITA, ARIZONA 85629

Effective: June 16, 2003 **Expires: June 15, 2008**
Revised: April 12, 2005 (refer to Page 47 'Permit Revision Activity Log')

Permit Number 2026
ASARCO, LLC, Mission Complex
4201 West Pima Mine Road
Sahuarita, Arizona 85629

SUMMARY

ASARCO, LLC, owns and operates the Mission Complex in Pima County near Sahuarita, Arizona. The Mission Complex extracts local copper ores using both open pit and underground mining methods. Approximately 63,000 tons of copper ore each day is crushed, screened, and concentrated using a conventional froth flotation method. Mission operates 24 hours per day, 365 days per year except during preventive maintenance, shutdown, or repair of equipment.

Emissions at Missions consist primarily of fugitive and non-fugitive particulate matter generated during mining and mineral processing activities. Small quantities of other regulated pollutants are also emitted from portable combustion sources and volatile organic liquid storage activities. Fugitive matter is controlled by a combination of methods including, but not limited to, retention of native vegetation, application of water by water trucks or other means, application of wet tailings (smearing), and good mining practices. Emissions from metallic mineral processing activities are controlled by a variety of enclosures, water sprays, and, in some instances, wet scrubbers and baghouses. Some of the wet scrubbers and baghouses are used to control emissions at points subject to the New Source Performance Standards for Metallic Mineral Processing Plants (40 CFR Part 60, Subpart LL).

The following table summarizes the potential to emit of ASARCO Mission with the federally enforceable controls contained in the permit. These figures were taken from the information contained in the application dated October 2, 1997 (as supplemented by a variety of correspondence since that date) and from standard emission factors in Section 11.24 of AP-42. These figures are for information purposes only, are used to establish baseline emissions for the source, and are not intended to be enforceable emission limits.

Potential-to-Emit (Tons per Year)			
Pollutant	Fugitives	Non-Fugitives	Total Emissions
Nitrogen Oxides	<100	<100	<100
Carbon Monoxide	>250	<100	>250
Particulate Matter (PM ₁₀)	>250	>250	>250
Sulfur Dioxide	<100	<100	<100
Volatile Organic Compounds	Insignificant	<100	<100
Hazardous Air Pollutants	Insignificant	<10	<10

The ASARCO Mission Complex is a major source of particulate matter (PM₁₀) and a minor source for all other criteria and hazardous air pollutants.

Nothing in this Permit should be construed as to prohibit ASARCO, LLC, from selling non-ore grade rock or tailing to independent processors operating separately owned and permitted equipment for processing on or off site.

All terms and conditions of this permit are federally enforceable unless specifically indicated otherwise.

Summary of Permit Requirements
ASARCO, LLC, Mission Complex - Permit Number 2026
 (References to PCC are references to Title 17 of the Pima County Code)

Emission Unit	Pollutants Emitted	Control Measures	Emission Limits/Standards	Monitoring	Recordkeeping/Reporting	Testing Frequency/Methods
Crushers, screens, bucket elevators, conveyor belt transfer points, thermal dryers, product packaging stations, storage bins, enclosed storage areas, truck loading and unloading stations, railcar loading, and railcar unloading stations at the mill or concentrator subject to the standards in 40 CFR, Part 60, Subpart LL. Part D identifies all equipment subject to the NSPS applicable requirements.	PM ₁₀	Wet scrubbers, dry filters. wet suppression.	<p>Limits/Standards</p> <p>≤0.05 grams per dry standard cubic meter from any stack.</p> <p>≤7% opacity at any stack except wet scrubber stacks.</p> <p>≤10% opacity for all process fugitives</p>	<p>Change in gas pressure and water flow rate for wet scrubbing emission control devices.</p> <p>Establish a baseline opacity level for point sources.</p> <p>At least biweekly (once each two weeks) visible emission surveys.</p> <p>Method 9 observations as necessary.</p>	<p>Record name of observer, date of observation, and results of observation for all visible emission surveys.</p> <p>Record and report location, date, time, and test results for all Method 9 observations.</p> <p>Written reports of the results of all stack tests.</p> <p>Weekly measurements of change in gas stream pressure and liquid flow rates for all wet scrubbing control devices.</p> <p>Semiannual reports when gas pressure or liquid flow rates of wet scrubbers exceed ±30% of standard.</p> <p>Report construction or reconstruction, initial startup, physical or operational changes, dates of anticipated initial opacity observations.</p> <p>Maintain records of occurrence of startup, shutdown, or malfunctions of affected facilities or control equipment.</p>	<p>Initial Performance test within 60 days of startup (EPA Test Method 5 or 17 and 9).</p> <p>At least one additional stack test during the term of the permit in each stack group (EPA Test Method 5 or 17).</p> <p>At least annual opacity tests at each non-wet scrubber stack (EPA Test Method 9).</p>

Emission Unit	Pollutants Emitted	Control Measures	Emission Limits/Standards	Monitoring	Recordkeeping/Reporting	Testing Frequency/Methods
Mines, mills, concentrators, crushers, screens, material handling facilities, fine ore storage, dryers, roasters, loaders, and miscellaneous sources such as fugitive dust producing activities, haul roads, mineral tailings, and storage piles. [SIP Rules 224, 315, 316, 321, 332, and 343; PCC 17.16.040, 17.16.050, 17.16.060, 17.16.090, 17.16.100, 17.16.110, 17.16.120, and 17.16.360.	PM ₁₀	Including, but not limited to, wet scrubbers, dry filters, wet suppression, wetting agents, load covering, hooding, limiting vehicular access, and speed, vegetative cover, chemical dust suppressants, application of water by water trucks or other means, application of wet tailings (smearing), minimizing material fall, paving, and landscaping,	E=3.59P ^{0.62} Or E=17.31P ^{0.16} Dust emissions must be minimized using reasonable precautions. Control visible emission crossing property lines. Throughput limit on South Mill primary crusher of 2000 tph and South Mill Omnicone secondary crushers of 200 tph each. Opacity ≤20%	Monitor the daily process rates and hours of operation of all material handling facilities. Establish a baseline opacity level for point sources. At least bi-weekly (once each two weeks) visible emission surveys. Method 9 observations as necessary. Monitor vehicular activity, speed limits, effectiveness of dust control measures at all emission areas, smearing of tailings, water spray equipment, and use of water at the mine shovels.	Record daily process rates and hours of operation of all material handling facilities. Record name of observer, date of observation, and results of observation for all visible emission surveys. Record and report location, date, time, and test results for all Method 9 observations. Record dates and methods when reasonable precautions were employed or develop a Monitoring Plan. Record and report all periods when the South Mill primary crusher or the South Mill Omnicone secondary crushers are operated above 2000 tph or 200 tph respectively.	EPA Test Method 5 if particulate testing is required. At least one opacity test per year at each stack subject to the opacity standard according to the schedule using EPA Test Method 9. At least one opacity test per month at the tailing impoundment using EPA Test Method 9.
	Reduced Sulfur	Proper and timely equipment maintenance.	Reduced sulfur emissions must be ≤10% of the sulfur entering the process.	Install a continuous monitoring system for SO ₂ emissions if Permittee expects not to be able to comply with the reduced sulfur standard.		

Emission Unit	Pollutants Emitted	Control Measures	Emission Limits/Standards	Monitoring	Recordkeeping/Reporting	Testing Frequency/Methods
Fuel storage tanks [SIP Rule 314 and PCC 17.16.230]	VOC and HAPs	Submerged filling device. Use of mechanical seals or other equipment on pumps and compressors to prevent release of VOC.	Not Established.	Monitor the type of liquid stored, typical Reid vapor pressure, and dates of storage.	Maintain a record of type of liquid stored, typical Reid vapor pressure, and dates of storage.	Not Required
Demolition and Renovation [PCC 17.16.530.A.8]	Asbestos	As required by rule	As required by rule	Relevant paperwork on file	Relevant paperwork on file	Not required
Nonvehicle Air Conditioner Maintenance and/or Service [40 CFR 82, Subpart F]	Ozone depleting substances	As required by rule	As required by rule	Relevant paperwork on file	Relevant paperwork on file	Not required

Emission Unit	Pollutants Emitted	Control Measures	Emission Limits/Standards	Monitoring	Recordkeeping/Reporting	Testing Frequency/Methods
Use of on-specification used oil for ANFO mixture.	Lead, HAPs, VOC, and halogens	Use only oil generated on site and use no oil that may be classified as a hazardous waste.	<p>Individual constituent limits on concentrations.</p> <p>Limits on amounts of oil that may be used in any month and any 12-month period.</p> <p>Used oil may not constitute more than 50% of the ANFO mix.</p>	Monitor the amount of oil used in the ANFO mix each month.	<p>Record total gallons of used oil used each calendar month and record a 12-month rolling total of that use.</p> <p>Record results of the chlor-d-tect test for each load of used oil.</p> <p>Record results of the quarterly (or monthly) tests for each constituent.</p>	<p>Test each load of used oil for total halogens using a chlor-d-tect test or its equivalent.</p> <p>At least quarterly, test the used oil in the used oil tank at the ANFO fuel loading station for arsenic, cadmium, chromium, lead, polychlorinated biphenyls, and flash point.</p>
All equipment and operations	As previously listed.	As previously listed.	As previously listed.	As previously listed.	<p>Semiannual summary reports of required monitoring.</p> <p>Semiannual compliance certification reports.</p> <p>Emissions inventory reports when requested by the Control Officer.</p>	As previously listed.

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Permit Issued To: ASARCO, LLC, Mission Complex
Permit Number: 2026

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 [A.R.S. § 49-480.A, PCC 17.12.160.C.2 & PCC 17.12.180.A.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 & b]

- A. The Permittee shall comply with all conditions of this permit including all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
- B. Need to halt or reduce activity not a defense. 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 & 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 Act become applicable to a major source. Such reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed not 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. 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 Administrator, 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 this Part shall not result in the resetting of the five-year permit term.

IV. POSTING OF PERMIT

[PCC 17.12.080]

- A. Permittee shall post such permit, or a certificate of permit issuance on location where the equipment is installed in such a manner as to be clearly visible and accessible. All equipment covered by the permit shall be clearly marked with one of the following:
1. Current permit number.
 2. Serial number or other equipment number that is also listed in the permit to identify that piece of equipment.
- B. In the event that the equipment is so constructed or operated that such permit cannot be so placed, the permit shall be mounted so as to be clearly visible in an accessible place within a reasonable distance of the equipment or maintained readily available at all times on the operating premises.
- C. A copy of the complete permit shall be kept on the site.

V. FEE PAYMENT

[PCC 17.12.180.A.9 & PCC 17.12.510]

Permittee shall pay fees to the control officer pursuant to A.R.S. § 49-480.D and 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 request and provides the inventory form each year, whichever occurs later, and shall include emission information for the previous calendar year.

- B. The questionnaire shall be on a form provided by or approved by the control officer and shall include the information required by PCC 17.12.320.

VII. COMPLIANCE CERTIFICATION

[PCC 17.12.180.A.5 & PCC 17.12.220.A.2]

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, or work practices that are the basis of the certification;
2. Identification of method(s) or other means used by the owner or operator 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 the monitoring, related recordkeeping and reporting sections of this permit;
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; and
4. A progress report on all outstanding compliance schedules submitted pursuant to PCC 17.12.220.

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.C.4]

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

XI. AFFIRMATIVE DEFENSES FOR EXCESS EMISSIONS DUE TO MALFUNCTIONS, STARTUP, AND SHUTDOWN

[A.R.S §49-480.B & A.A.C. 18-2-310]

A. Applicability. This permit condition 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:

1. Promulgated pursuant to Sections 111 or 112 of the Act,
2. Promulgated pursuant to Titles IV or VI of the Clean Air Act,
3. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. E.P.A.,
4. Contained in PCC 17.16.280.F, or
5. Included in a permit to meet the requirements of PCC 17.16.590.A.5.

B. Affirmative Defense for Malfunctions

Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. The owner or operator 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:

1. 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;
2. 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;
3. 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;
4. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
5. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
6. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
7. 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;
8. 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;
9. All emissions monitoring systems were kept in operation if at all practicable; and
10. The owner or operator's actions in response to the excess emissions were documented by contemporaneous records.

C. Affirmative Defense for Startup and Shutdown

1. Except as provided in XI.C.2, 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 owner or operator 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 this Part and has demonstrated all of the following:

- a. The excess emissions could not have been prevented through careful and prudent planning and design;
 - b. 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;
 - c. 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;
 - 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. 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;
 - g. All emissions monitoring systems were kept in operation if at all practicable; and
 - h. The owner or operator's actions in response to the excess emissions were documented by contemporaneous records.
- 2: 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.B.

D. 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.B.

E. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under XI.B or C, the owner or operator of the source shall demonstrate, through submission of the data and information required by this Section and XII.B, that all reasonable and practicable measures within the owner or operator's control were implemented to prevent the occurrence of the excess emissions.

XII. RECORD KEEPING REQUIREMENTS

[PCC 17.12.180.A.4]

A. Permittee shall keep records of all required monitoring information including, but not limited to, the following:

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

B. 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.

XIII. REPORTING REQUIREMENTS

[PCC 17.12.180.A.5.a]

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

A. Compliance certifications pursuant to Part "A", Section VII of this permit.

B. Excess Emissions Reporting Requirements [PCC 17.28.065, A.R.S. §49-480.B & A.A.C. 18-2-310.01]

1. The owner or operator of any source shall report to the control officer any emissions in excess of the limits established by this permit. The report shall be in two parts as specified below:
 - a. Notification by telephone or facsimile within 24 hours of the time the owner or operator first learned of the occurrence of excess emissions that includes all available information from XIII.B.2.

The number to call to report excess emissions is **520-740-3340**.

- b. Detailed written notification by submission of an excess emissions report within 72 hours of the notification under XIII.B.1.a.

PDEQ 150 W. Congress St. Tucson AZ, 85701

2. The excess emissions report shall contain the following information:

- a. The identity of each stack or other emission point where the excess emissions occurred;
- b. 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;
- c. The time and duration or expected duration of the excess emissions;
- d. The identity of the equipment from which the excess emissions emanated;
- e. The nature and cause of the emissions;
- f. 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;
- g. The steps that were or are being taken to limit the excess emissions; and
- h. 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.

3. 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 XIII.B.1 and 2.

C. **Permit Deviations (Other Than Excess Emissions) Reporting Requirements.** 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. For the purposes of this condition, "promptly report" shall mean that the Permittee submitted the report to the control officer by certified mail or hand-delivery within two working days of the time the deviation was discovered.

D. Reporting requirements listed in Part "B" of this permit.

XIV. DUTY TO PROVIDE INFORMATION

[PCC 17.12.160.G & PCC 17.12.180.A.8.e]

- 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.

XV. PERMIT AMENDMENT OR REVISION [PCC 17.12.240, PCC 17.12.250 & PCC 17.12.260]

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

- A. Administrative Permit Amendment (PCC 17.12.240.);
- B. Minor Permit Revision (PCC 17.12.250.);
- C. Significant Permit Revision (PCC 17.12.260.).

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

XVI. FACILITY CHANGE WITHOUT PERMIT REVISION [PCC 17.12.230]

- A. Permittee may make changes at the permitted source without a permit revision if all of the following apply:
 1. The changes are not modifications under any provision of Title I of the Act or under A.R.S. § 49-401.01(17).
 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 17.12.250.
 5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, 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 it meets all of the requirements of subsections (A) and (C) of this Section.
- C. For each such change under subsections A and B of this Section, a written notice by certified mail or hand delivery shall be received by the control officer and, for Class I permits, the Administrator, a minimum of 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 as possible or, if advance notification is not practicable, as soon after the change as possible. Each notification shall include:
1. When the proposed change will occur.
 2. A description of each such 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.
 7. Any permit term or condition that is no longer applicable as a result of the change.

XVII. TESTING REQUIREMENTS

[PCC 17.12.050]

A. Operational Conditions During Testing

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. 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.B. and the Arizona Testing Manual. This test plan must include the following:

1. test duration;

2. test location(s);

3. test method(s); and

4. source operation and other parameters that may affect test results.

C. Stack Sampling Facilities

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 platforms;

3. Safe access to sampling platforms; and

4. Utilities for sampling and testing equipment.

D. Interpretation of Final Results

Each performance test shall consist of three separate runs using the required test method.

Each run shall be conducted in accordance with the applicable standard and test method.

For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. If a sample is accidentally lost or conditions occur which are not under the Permittee's control and which may invalidate the run, compliance may, upon the control officer's approval, be determined using the arithmetic mean of the other two runs.

E. 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 and PCC 17.12.050.A.

F. Cessation of Testing After the First Run Has Started

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 conditions 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 that demonstrates good cause must be submitted.

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.

XIX. SEVERABILITY CLAUSE

[PCC 17.12.180.A.7]

The provisions of this permit are severable. If any provision of this permit is held invalid, the remainder of this permit shall not be affected thereby.

XX. PERMIT SHIELD

[PCC 17.12.310]

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements identified in Part "C" of this permit. The permit shield shall not apply to any change made pursuant to Section XV.B of this Part and Section XVI of this Part.

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

Should this stationary source, as defined in 40 CFR Section 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 semiannual compliance certification as required by 40 CFR Part 70 and Part "B" of this permit.

Part "B": SPECIFIC CONDITIONS
Air Quality Control Permit No. 2026
For
ASARCO, LLC, Mission Complex

I. Emission Limitations and Standards.

A. Facilities subject to the New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants (40 CFR Part 60, Subpart LL). The provisions of this section are applicable to the NSPS affected facilities identified as such in Part D of this permit. Control devices (e.g., wet scrubbers and dry filters) that control emissions from these facilities are subject to the NSPS standards regardless of date of construction or modification and have also been identified as being subject to NSPS applicable requirements in Part D of this permit. [40 CFR, §60.380]

1. The Permittee shall not cause to be discharged into the atmosphere from an affected facility any stack emissions that:
 - a. Contain particulate matter in excess of 0.05 grams per dry standard cubic meter. [40 CFR, §60.382(a)(1)]
 - b. Exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing emission control device. [This is a Material Permit Condition] [40 CFR, §60.382(a)(2)]
2. 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. [This is a Material Permit Condition] [40 CFR, §60.382(b)]
3. The opacity standards set forth in I.A.1.b and I.A.2 of this Part shall apply at all times except during periods of startup, shutdown, and malfunction. [40 CFR, §60.11(c)]
4. 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 Administrator or 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)]

B. Facilities subject to Title 17 of the Pima County Code (e.g., 17.16.360 - Standards of Performance for Nonferrous Metals Industry Sources). The provisions of this Section are applicable to the following affected facilities: mines, mills, concentrators, crushers, screens, material handling facilities, fine ore storage, dryers, roasters, and loaders.

1. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any process source subject to the provisions of

this Section in total quantities in excess of the amounts calculated by one of the following equations: [SIP Rule 332 and PCC 17.16.360.B]

- a. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 3.59P^{0.62}$$

where:

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

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

- b. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

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

where "E" and "P" are defined as indicated in I.B.1.a of this Part.

2. The actual values shall be calculated from the applicable equations and rounded off to two decimal places. [This Condition Is Not Federally Enforceable] [PCC 17.16.360.C]
3. For purposes of I.B.1.a and b, 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. [This Condition Is Not Federally Enforceable] [PCC 17.16.360.D]
4. No person shall cause, allow or permit to be discharged into the atmosphere from any dryer or roaster 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. [This Condition Is Not Federally Enforceable] [PCC 17.16.360.E]
5. No person shall 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: [SIP Rule 321, PCC 17.16.040, and PCC 17.16.050.B]
6. After April 23, 2006, greater than 20% in any area that is attainment or unclassifiable for each particulate matter standard except as provided in subsections 17.16.130.D & E. [PCC 17.16.130.B]

C. Requirements for Open Areas, Roadways, Streets, Material Handling, Storage Piles, and Tailings.

1. 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 dust collecting equipment, spray bars, wetting

agents, dust suppressants, covering the load, and hoods to prevent excessive amounts of particulate matter from becoming airborne. [SIP Rule 316.A and PCC 17.16.100.A]

2. No person shall 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 subject to the following provisions: [SIP Rule 321, PCC 17.16.040, and PCC 17.16.050.B]
 - a. Opacities (optical densities) of an effluent shall be measured by a certified visible emissions evaluator with his natural eyes, approximately following the procedures which were used during his certification, or by an approved and precisely calibrated in-stack monitoring instrument.
 - b. A violation of an opacity standard shall be determined by measuring and recording a set of consecutive, instantaneous opacities, and calculating the arithmetic average of the measurements within the set unless otherwise noted herein. The measurements shall be made at approximately fifteen-second intervals for a period of at least six minutes, and the number of required measurements shall be 25. Sets need not be consecutive in time, and in no case shall two sets overlap. If the average opacity of the set of instantaneous measurements exceeds the maximum allowed by any rule, this shall constitute a violation.
 - c. The use of air or other gaseous diluents solely for the purpose of achieving compliance with an opacity standard is prohibited.
 - d. When the presence of uncombined water is the only reason for failure of a source to otherwise meet the requirements of this Condition, this Condition shall not apply.
3. 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]
 - a. Sources required to obtain an air quality permit under ARS § 49-426, § 49-480 or Rule 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.
 - b. 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.

- c. This Condition shall not apply to the generation of airborne particulate matter from undisturbed land.
4. Dust emissions from the transportation of materials must be minimized by covering stock loads in open-bodied trucks, limiting vehicular speeds, or other equivalently effective controls. [SIP Rule 316.C and PCC 17.16.100.C]
5. 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. [This Condition Is Not Federally Enforceable] [PCC 17.16.050.A]
6. 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]
7. 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. [This Is Not a Federally Enforceable Condition] [PCC 17.16.110.B]
8. 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. Dust emissions shall be controlled by applying adequate amounts of water, chemical stabilizer, or other effective dust suppressant until the area becomes permanently stabilized by paving, landscaping, or otherwise. [SIP Rule 224.A. and PCC 17.16.060.A]
9. 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]
10. Mineral Tailings: [This Is Not a Federally Enforceable Condition] [PCC 17.16.120]
- a. 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 by water trucks or other means, chemical stabilization, application of wet tailings (smearing), revegetation or such other measures as are approved by the Control Officer.
- b. No person shall cause, suffer, allow, or permit construction of mineral tailings piles without taking reasonable precautions (i.e. wetting by water truck or other means, chemical stabilization, application of wet tailings (smearing), or revegetation) to minimize and control dust emissions.

11. The Permittee shall employ at least one of the following reasonably necessary and feasible precautions, or any other method as proposed by the Permittee and approved by the control officer (following compliance with any applicable air permit revision provision), to prevent excessive amounts of particulate matter from becoming airborne: Use dust suppressants or soil stabilizers; paving; covering; landscaping; continuous wetting; detouring, or barring access when constructing, using altering, repairing, demolishing, clearing, or leveling a building or its appurtenances, a driveway, a parking area, or a vacant lot, or when moving or excavating earth; applying wetting agents; stemming; optimizing blast patterns; controlling oxygen balance of explosives during blast operations; minimizing drop heights; temporary paving; road cover; controlling vehicle access; limiting vehicle speed; revegetating; hydro-seeding; hydro-mulching; mulching; wet sweeping; vacuuming; use of wind fences and wind breaks; shrouding; skirting; enclosing; contouring; animals; soil adhesives; compaction; agglomeration; inherent moisture content; encrustation; apply temporary paving; dust suppressants; wetting down, or detouring when using, repairing, constructing, or reconstructing a roadway; applying wetting agents; controlling vehicle access; limiting vehicle speed; revegetation; minimizing material drop heights; use of spray bars; covering; hooding; chemical stabilization; covering with decomposed granite; capping new tailing dam roads with native dirt; treating heavily traveled perimeter roads with dust suppressants as necessary; spraying active berms and construction areas with water as necessary; controlling the surface of tailings impoundments using wet dam construction maintaining the majority of the impoundment surface wet or encrusted; use wetting agents or dust suppressants before cleaning any site, roadway or alley; removing earth and other material from paved streets where it had been transported by trucks or earth moving equipment, erosion, or other means; chip sealing; and graveling The preceding listed control measures are included in the permit for the purposes of satisfying the requirement at I.C.3.a.

D. Fuel Storage Tanks. [Applicable to the Owens-Corning Underground Gasoline Fuel Storage Tank with a 20,000-gallon capacity]

1. Petroleum liquid storage tanks shall be equipped with a submerged filling device, a refrigeration-type vapor recovery system, or acceptable equivalent, for the control of hydrocarbon emissions. [This is a Material Permit Condition] [SIP Rule 314 and PCC 17.16.230.B]
2. All pumps and compressors which handle volatile organic compounds shall be equipped with mechanical seals or other equipment of equal efficiency to prevent the release of organic contaminants into the atmosphere. [This Condition Is Not Federally Enforceable] [PCC 17.16.230.D]

E. 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). [PCC 17.16.530.]

F. Nonvehicle Air Conditioner Maintenance and/or Services: The Permittee shall comply with all of the requirements of 40 CFR 82, Subpart F (Protection of Stratospheric Ozone - Recycling and Emissions Reduction). [40 CFR 82, Subpart F]

G. The Permittee is prohibited from operating the South Mill primary crusher at a capacity greater than 2,000 tons per hour and the South Mill Omnicone secondary crushers at a capacity greater than 200 tons per hour each except during any period when the Mission primary crusher, or the Mission secondary crusher, or the North primary crusher is off-line. [PCC 17.12.220.B and Installation Permit #2026]

H. Use of On-Specification Used Oil in Lieu of Virgin Fuel Oil. When the Permittee uses on-specification used oil in lieu of virgin oil in its Ammonium Nitrate Fuel Oil (ANFO) blasting agent, The Permittee shall: [PCC 17.12.220.B]

1. Use only the used oil generated on site.
2. Use no oil that may be classified as a hazardous waste.
3. Use no more than the following quantities of on-specification used oil:
 - a. 15,000 gallons in any calendar month or 120,000 gallons during any twelve month period, calculated on a twelve-month rolling total basis; and
 - b. 50 percent of any ANFO load, controlled at the time of mixing.
4. Not exceed the following allowable levels of contaminant concentrations in the used oil:

Constituent/Property	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Polychlorinated Biphenyls	3 ppm maximum
Flash Point	100°F minimum
Total Halogens	1000 ppm maximum

II. Monitoring of Operations.

A. Facilities subject to the New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants (40 CFR Part 60, Subpart LL).

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. 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. [This is a Material Permit Condition] [40 CFR, §60.384(a) and PCC 17.12.350]
2. 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 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. [This is a Material Permit Condition][40 CFR, §60.384(b) and PCC 17.12.350]

B. Facilities subject to Title 17 of the Pima County Code (17.16.360 - Standards of Performance for Nonferrous Metals Industry Sources) and miscellaneous sources.

1. The Permittee shall monitor the daily process rates and hours of operation of all material handling facilities. [PCC 17.16.360.F]
2. A continuous monitoring system for measurement sulfur dioxide emissions shall be installed, calibrated, maintained and operated by the owner or operator where dryers or roasters are not expected to achieve compliance with the standard under I.B.4 of this Part. [This is a Material Permit Condition] [PCC 17.12.350 and 17.16.360.G]

C. Visible Emissions Monitoring. [PCC 17.12.180.A.3]

1. Biweekly (every two weeks) monitoring of process fugitive emissions from sources subject to I.A.2 of this Part.
 - a. A certified Method 9 observer shall conduct a biweekly visual survey of visible emissions from the process fugitive sources while they are in operation.
 - b. If the observer, during the visual survey, does not see any plume from any process fugitive source that, on an instantaneous basis, appears to exceed the 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.
 - c. If the observer sees a plume from a process fugitive source that, on an instantaneous basis, appears to exceed the opacity standard, then the observer shall, if practicable, take a six-minute Method 9 observation of the plume.
 - d. If the six-minute opacity of the plume is less than the opacity standard, then the observer shall make a record of the following:
 - (1) Location, date, and time of the test; and
 - (2) The results of the Method 9 observation.
 - e. If the six-minute opacity of the plume exceeds the opacity standard, then the Permittee shall do the following:
 - (1) Adjust or repair the controls or equipment to reduce the opacity to below the opacity standard; and

(2) Report it as excess emissions.

2. Initial requirement for point source emissions from sources subject to I.A.1.b and I.B.5 of this Part: Within 180 days of the issuance of this permit or within 180 days of startup of the source, whichever is later, the Permittee shall conduct a certified Method 9 observation on each point source at normal representative operating conditions to establish a baseline opacity level. Within 10 days of establishing the baseline opacity at a point source, the Permittee shall report the results to the control officer.

3. Biweekly (every two weeks) monitoring of point source emissions from sources subject to I.A.1.b and I.B.5 of this Part.

a. A certified Method 9 observer shall conduct a biweekly visual survey of visible emissions from the point sources during operations.

b. If the observer, during the visual survey, does not see a plume from the point source that, on an instantaneous basis, appears to exceed the baseline level, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location of the observation, and the results of the observation.

c. If the observer sees a plume from the point source that, on an instantaneous basis, appears to exceed the baseline level, then the observer shall, if practicable, take a six-minute Method 9 observation of the plume.

d. If the six-minute opacity of the plume is less than the baseline, the observer shall make a record of the following:

(1) Location (stack identification if applicable), date, and time of the test; and

(2) The results of the Method 9 observation.

e. If the observer sees a plume from the point source that, on an instantaneous basis, appears to exceed the baseline level, then the observer shall, if practicable, take a six-minute Method 9 observation of the plume.

f. If the six-minute opacity of the plume is less than the baseline level, the observer shall make a record of the following:

(1) Location, (stack identification if applicable), date, and time of the test; and

(2) The results of the Method 9 observation.

g. If the six-minute opacity of the plume exceeds the baseline level but is less than the opacity standard, then the Permittee shall adjust or repair

the controls or equipment, as necessary, to reduce the opacity to at or below the baseline level. The Permittee shall make a record of the following:

- (1) Location, (stack identification if applicable), date, and time of the test; and
 - (2) The results of the Method 9 observation.
- h. If the six-minute opacity of the plume exceeds both the baseline level and the opacity standard, then the Permittee shall do the following:
- (1) Adjust or repair the controls or equipment to reduce opacity to at or below the baseline level; and
 - (2) Report it as an excess emission for opacity.
- i. If corrective actions fail to reduce opacity to at or below the baseline level, the Permittee shall adopt the following course of action:
- (1) Document all corrective action; and
 - (2) Initiate procedures to re-establish the baseline opacity within forty-eight hours by following the same procedures used in establishing the original baseline level. Within 10 days of re-establishing the baseline opacity, the Permittee shall report the results to the control officer. The report shall also contain a description of the need for re-establishing the baseline.
- j. The Permittee shall conduct at least one Method 9 opacity test annually for each point source subject to the requirements of this section, if that point source operated during the calendar year.

4. Biweekly (every two weeks) monitoring of fugitive sources subject to I.B of this Part.

- a. If the observer, during the visual survey, does not see any plume from any fugitive source that, on an instantaneous basis, appears to exceed the opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, and the results of the observation.
- b. If the observer sees a plume from a fugitive source that, on an instantaneous basis, appears to exceed the opacity standard, then the observer shall, if practicable, take a six-minute Method 9 observation of the plume.
- c. If the six-minute opacity of the plume is less than the opacity standard, then the observer shall make a record of the following:
 - (1) Location, date, and time of the test; and

(2) The results of the Method 9 observation.

d. If the six-minute opacity of the plume exceeds the opacity standard, then the Permittee shall do the following:

(1) Adjust or repair the controls or equipment to reduce opacity to below the opacity standard; and

(2) Report it as excess emissions.

5. Biweekly (every two weeks) monitoring of non-point source emissions from sources subject to I.C of this Part.

a. Within 180 days of the issuance of this permit, the Permittee shall submit a visual observation plan to be approved by the control officer. The observation plan shall identify a central lookout station or multiple observation points, as appropriate, from where the non-point sources shall be monitored. When multiple observation points are used, all the non-point sources associated with each observation point shall be specifically identified within the observation plan. Any changes to the observation plan originally approved by the control officer shall be made only with the prior approval of the control officer.

b. A certified Method 9 observer shall conduct a biweekly visual survey of visible emissions from the non-point sources, while they are in operation, in accordance with the observation plan. The Permittee shall keep a record of the name of the observer, the date on which the observation was made, and the results of the observation. The Permittee shall keep a record of the name of the observer, the date on which the observation was made, and the results of the observation.

c. If the observer sees a plume from a non-point source that, on an instantaneous basis, appears to exceed 20%, then the observer shall, if practicable, take a six-minute Method 9 observation of the plume.

d. If the six-minute opacity of the plume is less than or equal to 20%, then the observer shall make a record of the following:

(1) Location, date, and time of the observation; and

(2) The results of the Method 9 observation.

e. If the six-minute opacity of the plume exceeds 20%, then the Permittee shall do the following:

(1) Adjust or repair the controls or equipment to reduce the opacity to 20% or less; and

(2) Report it as excess emissions.

f. The Permittee shall conduct at least one Method 9 opacity test each month of the tailing impoundment(s).

D. Sources Subject to I.C. of This Part Except for Haul Roads, Access Roads, and Tailings.

1. The Permittee shall monitor dust control measures employed and shall maintain records of the dates on which any of the activities listed in I.C.4 through 11 of this Part were performed and the control measure employed.

2. In lieu of the preceding condition, the Permittee may maintain a Non-Point Source Monitoring Plan as a means of monitoring and recordkeeping any of the activities listed in I.C.4 through 11 of this Part.

a. If the Non-Point Source Monitoring Plan has not been submitted to the control officer as part of the Class I application, the Permittee may submit a significant revision pursuant to Title 17 of the Pima County Code (§17.12.260) stating an intent to rely on a Non-Point Source Monitoring Plan. The Non-Point Source Monitoring Plan shall be submitted with the significant permit revision.

b. The Non-Point Source Monitoring Plan shall describe the methods the Permittee shall use to comply with the requirements of I.C of this Part. The plan shall contain the following minimum elements of information:

- (1) Types of control measures employed on an activity-specific basis;
- (2) Frequency of application of control measures; and
- (3) A system for documenting variations from the strategy outlined in the Non-Point Source Monitoring Plan.

c. If the Permittee relies on "inherent moisture content" as a reasonable precaution for minimizing particulate emissions caused by traffic over haul roads, the dates of the period for which this control measure was relied upon shall be recorded.

d. The Permittee may add any control method listed in I.C.4 through 11 of this Part to the list of control methods identified in the Non-Point Source Monitoring Plan. Such changes shall be recorded and a notification sent to the control officer within 10 days following the change. In addition, the Permittee may add any control method approved hereafter by the control officer to the list of control methods identified in the Non-Point Source Monitoring Plan by complying with the applicable permitting mechanism if a permit revision is required, and, in any other case, by recording the change and providing notification to the control officer within 10 days following the change.

E. Haul Roads and Access Roads. [PCC 17.12.180.A.3 and the August 11, 1998 Settlement Agreement]

1. The Permittee shall monitor vehicular activity that exceed 20 passes per shift (three shifts per day) on active roads within 20 yards of the property line that contains more than 60 linear feet of unpaved surface to ensure water has been applied as meteorological conditions warrant. The Permittee shall not be required to apply water more than once per hour.
2. The Permittee shall monitor to ensure that a 25 mph speed limit has been posted and observed for all vehicles traveling on active unpaved roads within 100 yards of the property line and that water has been applied as meteorological conditions warrant. The Permittee shall not be required to apply water more than two times per day.
3. The Permittee shall monitor active unpaved roads within 200 yards of the property boundary to ensure that appropriate means, such as berms, signs, or other effective procedures have been employed to limit traffic usage to treated, controlled, or speed restricted roadways.
4. On unpaved roads that have less than four passes per shift (three shifts per day) of light equipment traffic, no action on the part of the Permittee is required. The 25 mph limit will apply within 100 yards of the property line.

F. Tailings. [PCC 17.12.180.A.3 and the August 11, 1998 Settlement Agreement]

1. The Permittee shall monitor to ensure that tailings piles, during the berm building mode, have been smeared (i.e., with light coat of fresh, moist tailings on the surface of the dam) once every 60 days unless otherwise warranted by meteorological conditions.
2. The Permittee shall monitor vehicular traffic to ensure that such traffic has been restricted to those vehicles necessary for construction and maintenance.
3. The Permittee shall monitor to ensure that a 25 mph speed limit has been posted and observed for all vehicles traveling on tailings facilities capped with crushed rock and that water had been applied as meteorological conditions warrant. The Permittee shall not be required to apply water more than two times per day.
4. The Permittee shall monitor to ensure that active roadways associated with operational tailings facilities are watered as meteorological conditions warrant. The Permittee shall not be required to apply water more than two times per day.
5. The Permittee shall monitor to ensure that vehicular speed limits are posted and observed at no more than 25 mph.

G. Reserved.

- H. In the event of significant problematic and persistent property line visible emissions, PDEQ and the Permittee shall confer to determine whether additional reasonably necessary and feasible precautions are needed. In the event that PDEQ and the Permittee agree additional precautions are necessary, the Permittee shall propose for PDEQ approval precautions that seek to diminish, but may not necessarily eliminate, visible emissions at the property line.

I. Fuel Storage Tanks. For each petroleum liquid storage tank, the Permittee shall maintain a file of each type of petroleum liquid stored, of the typical Reid vapor pressure of each type of petroleum liquid stored, and of dates of storage. Dates on which the storage vessel is empty shall be shown. [PCC 17.16.230.E.1]

J. Demolition/Renovation: As a means of demonstrating compliance with condition I.E. of this Part, the Permittee shall keep a record of all relevant paperwork on file. The relevant paperwork shall include but not be limited to the "NESHAP Notification for Renovation and Demolition Activities" form, and all supporting documents.

K. Nonvehicle Air Conditioner Maintenance and/or Services: As a means of demonstrating compliance with condition I.F. of this Part, the Permittee shall keep a record of all paperwork relevant to the applicable requirements of 40 CFR 82, Subpart F on file.

L. ANFO Used Oil. The Permittee shall monitor the amount of used oil used in the ANFO mix each month. [PCC 17.12.180.A.3]

M. A continuous monitoring system for measurement of sulfur dioxide emissions shall be installed, calibrated, maintained, and operated by the permittee where dryers or roasters are not expected to achieve compliance under I.B.4 of this part.

III. Additional Recordkeeping and Reporting Requirements.

A. Facilities subject to the New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants (40 CFR Part 60, Subpart LL).

1. The Permittee shall submit to the Administrator and the Control Officer a written report of the results of all performance tests required in IV.A of this Part. [40 CFR, §60.385(a) and PCC 17.12.180.A.5]
2. During the initial performance test of a wet scrubber, and at least weekly thereafter, the Permittee 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)]
3. After the initial performance test of a wet scrubber, the Permittee shall submit semiannual reports to the Administrator and the Control Officer of occurrences when the measurements of the scrubber pressure loss (or gain) and liquid flow rate differ by more than ± 30 percent from the average obtained during the most recent performance test. These semiannual reports shall be postmarked within 30 days following the end of the second and fourth calendar quarters. [40 CFR, §60.385(c) and (d) and PCC 17.12.180.A.5]
4. The Permittee shall furnish the Administrator and the Control Officer written notification or, if acceptable to both the Administrator and the Permittee, electronic notification, as follows:
 - a. A notification of the date construction (or reconstruction as defined under 40 CFR, §60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in

the case of mass-produced facilities which are purchased in completed form. [40 CFR, §60.7(a)(1) and PCC 17.12.180.A.5]

- b. A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. [40 CFR, §60.7(a)(3) and PCC 17.12.180.A.5]
- c. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted in 40 CFR, §60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice. [40 CFR, §60.7(a)(4) and PCC 17.12.180.A.5]
- d. A notification of the anticipated date for conducting the opacity observations required by 40 CFR, §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator or the Control Officer to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. [40 CFR, §60.7(a)(6) and PCC 17.12.180.A.5]
- e. The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility and any malfunction of the air pollution control equipment. [40 CFR, §60.7(b) and PCC 17.12.180.A.5]
- f. The Permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by III.A of this Part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records. [40 CFR, §60.7(f) and PCC 17.12.180.A.4.b]

B. Facilities subject to Title 17 of the Pima County Code (17.16.360 - Standards of Performance for Nonferrous Metals Industry Sources) and miscellaneous sources.

1. 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 during which the South Mill primary crusher is operated above a 2,000 ton per hour capacity or the South Mill Omnicone secondary crushers are operated above a 200 ton per hour capacity each. The log entry shall indicate whether the Mission Primary crusher, the Mission secondary crusher or North primary crusher is off-line during the period when the South Mill Primary

or Omnicone secondary crushers operate above the respective limits. [PCC 17.12.220.B and PCC 17.16.360.F]

2. The Permittee shall maintain the records produced in II.B.1 of this Part and shall make such records available to the Control Officer upon the Control Officer's request. [PCC 17.12.180.A.4]

3. Upon reaching operating temperature after startup, permittee shall monitor and record temperature of screw dryers (equipment ID: 353-113 and 353-114) as indicated by thermostat. If recorded temperature reaches the upper range of the monitoring device, said device shall be replaced with a monitor of greater range. [17.12.180.A.4]

C. ANFO Used Oil. The Permittee shall keep the following records relating to use of used oil in the ANFO blasting agent mix: [PCC 17.12.180.A.4]

1. A record of the total gallons of used oil used each calendar month and a 12-month rolling total of that use.

2. A record of the chlor-d-TECT test (or equivalent) used to test each load of used oil added to the used oil storage tank at the ANFO fuel loading station.

3. A record of the quarterly tests (or monthly tests, as appropriate) for metals, polychlorinated biphenyls, and flash point.

4. A record of the calculations showing the total quantity of each metal and polychlorinated biphenyl constituent emitted by calendar month and 12-month rolling total.

D. All Facilities and Operations.

1. Semiannual Summary Reports of Required Monitoring. [PCC 17.12.180.A.5.a.]

a. The Permittee shall submit semiannual summary reports of the following monitoring and/or recordkeeping requirements:

(1) The number of biweekly visible emission surveys exceeding standards.

(2) Results of visible emission tests conducted during the reporting period.

(3) Results of any performance tests conducted during the reporting period.

(4) Any periods during which the South Mill primary or Omnicone secondary crushers were operated above the 2000 ton per hour or 200 ton per hour each respective limits.

(5) The amount of used oil (by month) used in the ANFO mix during the reporting period.

- b. Summary reports shall be due 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 summary 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 Part "A", Section XI shall be clearly identified in such reports.

2. Compliance Certification Reporting. [PCC 17.12.210.A.2.]

- a. The Permittee shall submit a semiannual compliance certification to the Control Officer and to EPA Region IX. The Compliance Certification Reports are due on January 31st and July 31st of each year. The first report due after permit issuance may not cover a 6-month period. (See Part "A", Section VII for detailed information on this report).

- b. 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. (applicable to units and operations subject to the NSPS standards) [40 CFR §60.11(g)]

3. Emissions Inventory Reporting. [PCC 17.12.320.]

Every source subject to a permit requirement shall complete and submit an annual emissions inventory questionnaire when requested by the control officer. (See Part "A", Section VI for additional information on this report).

- IV. Testing Requirements. For purposes of District enforcement, 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. [A.R.S. §49-480.B and PCC 17.12.050]

A. Facilities subject to the New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants (40 CFR Part 60, Subpart L).

1. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under section 114 of the Act, the Permittee shall conduct performance test(s) and furnish the Administrator and Control Officer a written report of the results of such performance test(s). [40 CFR, §60.8(a) and PCC 17.12.030.A]

2. In conducting the performance tests required in IV.A.1, the Permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR 60. [40 CFR, §60.386(a)]

3. The Permittee shall determine compliance with the particulate matter standards in III.A of this Part as follows: [40 CFR, §60.386(b)]

a. 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.

b. 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.

4. To comply with III.A.3 of this Part, the Permittee shall use the monitoring devices in II.A.1 and 2 of this Part 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)]

5. Performance tests shall be conducted under such conditions as the Administrator or Control Officer shall specify to the Permittee based on representative performance of the affected facility. The Permittee shall make available to the Administrator or Control Officer such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR, §60.8(c) and PCC 17.12.050.C]

6. The Permittee shall provide the Administrator and Control Officer at least 30 days prior notice of any performance test to afford the Administrator and Control Officer the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the Permittee shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement. [40 CFR, §60.8(d) and PCC 17.12.050.D]

7. The Permittee shall provide, or cause to be provided, performance testing facilities as follows: [40 CFR, §60.8(e)]

- a. Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
 - b. Safe sampling platform(s).
 - c. Safe access to sampling platform(s).
 - d. Utilities for sampling and testing equipment.
8. 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 must 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 Administrator's approval, be determined using the arithmetic mean of the results of the two other runs. [40 CFR, §60.8(f)]
9. Compliance with opacity standards in I.A, B, and C of this Part shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of 40 CFR or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard). [40 CFR, §60.11(b)]
10. For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in IV.A.1 of this Part unless one of the following conditions apply. If no performance test is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test, the Permittee shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the Administrator and the Control Officer of the rescheduled date. In these cases, the 30-day prior notification to the Administrator required in III.A.4.d shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Reference Method 9 of Appendix B of 40 CFR Part 60. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of

determining compliance with opacity standards. The Permittee shall make available, upon request by the Administrator or the Control Officer, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. [40 CFR, §60.11(e)(1) and PCC 17.12.050]

11. Except as provided in IV.A.12 of this Part, the Permittee shall conduct opacity observations in accordance with IV.A.9 of this Part, shall record the opacity of emissions, and shall report to the Administrator and the Control Officer the opacity results along with the results of the initial performance test required under IV.A.1. The inability of the Permittee to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test. [40 CFR, §60.11(e)(2) and PCC 17.12.050]

12. The Permittee may request the Administrator or the Control Officer to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. The Permittee shall report the opacity results. Any request to the Administrator or the Control Officer to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in III.A.4.d of this Part. If, for some reason, the Administrator or Control Officer cannot determine and record the opacity of emissions from the affected facility during the performance test, then the provisions of IV.A.11 shall apply. [40 CFR, §60.11(e)(3) and PCC 17.12.050]

13. Upon receipt from an owner or operator of the written reports of the results of the performance tests required by IV.A.1, the opacity observation results and observer certification required by IV.A.10, the Administrator will make a finding concerning compliance with opacity and other applicable standards. If the Administrator finds that an affected facility is in compliance with all applicable standards for which performance tests are conducted in accordance with IV.A.1 of this Part but during the time such performance tests are being conducted fails to meet any applicable opacity standard, he shall notify the Permittee and advise him that he may petition the Administrator within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility. [40 CFR, §60.11(e)(6)]

14. The Administrator will grant such a petition upon a demonstration by the Permittee that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the Administrator; and that the affected facility and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard. [40 CFR, §60.11(e)(7)]

15. The Administrator will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity standard in the Federal Register. [40 CFR, §60.11(e)(8)]

16. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in IV.A.1 of this Part, nothing in this Part 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)]

17. Periodic Testing. [PCC 17.20.010.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 following table. The provisions of EPA Reference Method 5 or 17 shall be used to conduct the test.

Unit I.D.	Description	Group I.D.
307-104	Ducon 108 Wet Scrubber	1
307-105	Ducon 108 Wet Scrubber	1
307-106	Ducon 108 Wet Scrubber	1
307-107	Ducon 108 Wet Scrubber	1
M311-E37	Wheelabrator Dust Collector	2
M311-E38	Wheelabrator Dust Collector	2
M311-E39	Wheelabrator Dust Collector	2
M311-E40	Wheelabrator Dust Collector	2
M311-E78	Wheelabrator Dust Collector	2
M311-E79	Wheelabrator Dust Collector	2
305-07	Rotoclone Wet Scrubber	3
307-108	Ducon 54 Wet Scrubber	4
311-99	Mikro-Pulsaire Dust Collector	5
311-101	Ducon 84 Wet Scrubber	6
20-270	Ducon 66 Wet Scrubber	7

b. The Permittee shall conduct at least one annual performance test to measure the opacity of the visible emissions exiting from each non-wet scrubber control device. The provisions of EPA Reference Method 9 shall be used to conduct the test. The stacks to be tested are listed in the following table:

Unit I.D.	Equipment Location
M311-E37	Mission Grinding Circuit #1
M311-E38	Mission Grinding Circuit #2
M311-E39	Mission Grinding Circuit #3
M311-E40	Mission Grinding Circuit #4
M311-E41	Mission Grinding Circuit #5
M311-E42	Mission Grinding Circuit #6
311-99	Mission North Grinding Circuit

B. Facilities subject to Title 17 of the Pima County Code (17.16.360 - Standards of Performance for Nonferrous Metals Industry Sources). The test methods and procedures

required for equipment and processes subject to I.B of this Part 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 (30 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 160°C.(320°F).
 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 1 m (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 20 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 30-minute intervals.
 5. Periodic Testing. The Permittee shall conduct at least one annual performance test to measure the opacity of the visible emissions exiting from each stack subject to the standards at I.B of this Part. The provisions of EPA Reference Method 9 shall be used to conduct the test. [PCC 17.20.010.B]
 6. Should screw dryers (equipment ID: 353-113 and 353-114) operate at a temperature of 700°F or greater, permittee shall test within 90 days using method 16A or a variant to demonstrate compliance with I.B.4 of this part.
- C. ANFO Used Oil. [PCC 17.12.220.B and 17.20.010.B]
1. The Permittee shall test each load of used oil for total halogens before the used oil is added to the used oil storage tank at the ANFO fuel loading station. The Permittee may use a field chlor-d-TECT test or equivalent. Any loads of used oil

exhibiting more than 1000 ppm of total halogens shall not be placed in the used oil storage tank.

2. At least once each quarter, the Permittee shall test the oil in the used oil storage tank at the ANFO fuel loading station for arsenic, cadmium, chromium, lead, polychlorinated biphenyls, and flash point to determine the concentrations of each constituent. The Permittee shall use an ASTM approved method to conduct this test. If the Permittee detects any of the listed constituents in concentrations exceeding 75 percent of the values in I.H.4 of this Part, the Permittee shall sample the oil in the used oil tank at least monthly until the concentrations fall to 75 percent or less of the values listed in I.R.4 of this Part. The Permittee shall not use the used oil in used oil tank in an ANFO mix until the concentrations fall to the 75 percent level or below.

Part "C": APPLICABLE REGULATIONS
Air Quality Control Permit Number 2026
For
ASARCO, LLC, Mission Complex

REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE

Compliance with the terms and conditions contained in this permit shall be deemed compliance with the following federally applicable requirements in effect on the date of permit issuance:

Code of Federal Regulations, Title 40

- | | |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 40 CFR Part 60 Subpart A | General Provisions (§§60.7(a)(1), 60.7(a)(3), 60.7(a)(4), 60.7(a)(6), 60.7(b), 60.7(f), 60.8(a), 60.8(c), 60.8(d), 60.8(e), 60.8(f), 60.11(b), 60.11(c), 60.11(d), 60.11(e)(1), 60.11(e)(2), 60.11(e)(3), 60.11(e)(6), 60.11(e)(7), 60.11(e)(8), and 60.11(g). |
| 40 CFR Part 60 Subpart LL | Standards of Performance for Metallic Mineral Processing Plants (§§60.380, 60.382(a)(1), 60.382(a)(2), 60.382(b), 60.384(a), 60.384(b), 60.385(a), 60.385(b), 60.385(c), 60.386(a), 60.386(b), and 60.386(c). |
| 40 CFR Part 82 Subpart F | Protection of Stratospheric Ozone - Recycling and Emissions Reduction |

Pima County SIP:

- | | |
|----------|------------------------------------------------------------------------------------------------|
| Rule 224 | Fugitive Dust Producing Activities (Subsections A |
| Rule 314 | Petroleum Liquids |
| Rule 315 | Roads and Streets (Subsections D |
| Rule 316 | Particulates Materials (Subsections A, C, D) |
| Rule 321 | Emissions Discharge Opacity Limiting Standards - Standards and Applicability (Includes NESHAP) |
| Rule 332 | Compilation of Mass Rates and Concentrations (NESHAPS) |
| Rule 343 | Visibility Limiting Standard |

Installation Permit #2026-6 (June 14, 1991)

Compliance with the terms contained in this permit shall be deemed compliance with the following non-federally applicable requirements in effect on the date of permit issuance:

Pima County Code (PCC) Title 17:

- | | |
|----------------------|----------------------------------------------------------------------------|
| 17.16.040 | Visible Emission Standards - Standards and Applicability (Includes NESHAP) |
| 17.16.050 | Visibility Limiting Standard |
| 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 | Applicability, New and Existing Stationary Source Performance Standards |
| 17.16.230.B,D, and E | Standards of Performance for Storage Vessels for Petroleum Liquids |
| 17.16.360 | Standards of Performance for Nonferrous Metals Industry Sources |
| 17.16.530 | National Emissions Standards for Hazardous Air Pollutants |

Part "D": EQUIPMENT LIST

Air Quality Control Permit Number 2026
For
ASARCO, LLC, Mission Complex

Note: Equipment items marked with an asterisk are subject to the New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants (40 CFR part 60, Subpart LL) or are control devices that are controlling emissions from affected facilities subject to the NSPS and have particulate matter standards associated with them.

Unit I.D.	Description	Capacity	Serial Number	Model	Manufactured or Modified
Mission Primary Crushing					
M303-E3	Traylor Primary Crusher	2290 tph	77200	TC	6/61
M303-E4	Stephens Adamson Apron Feeder	1145 tph	M-2162-2	11945-LA	6/61
M303-E5	Stephens Adamson Apron Feeder	1145 tph	M-2162-2	11945-LA	6/61
M303-E9	Wearbelt	2290 tph	NA	NA	6/61
303-21	Ducon Wet Scrubber	41503 cfm	NA	108	<8/25/82
M309-E1	Conveyor	2290 tph	NA	Stacker	6/61
V305-E1	Syntron Vibratory Feeder	382 tph	110324	F86-D	6/61
V305-E2	Syntron Vibratory Feeder	382 tph	110325	F86-D	6/61
V305-E3	Syntron Vibratory Feeder	382 tph	110326	F86-D	6/61
V305-E4	Syntron Vibratory Feeder	382 tph	110327	F86-D	6/61
V305-E5	Syntron Vibratory Feeder	382 tph	110328	F86-D	6/61
V305-E6	Syntron Vibratory Feeder	382 tph	358093	F86-D	6/61
*305-07	American Air Wet Scrubber (Rotoclone)	5947 cfm	N800041	2-D	6/61
*M309-E2	Conveyor	1145 tph	NA	NA	8/93
*M309-E6	Conveyor	1145 tph	NA	NA	8/93
Mission Secondary/Tertiary Crushing					
*M307-E1	Svedala Double Deck Screen	1300 tph	NA	XH	1998
*M307-E2	Svedala Double Deck Screen	1300 tph	NA	XH	1998
*307-E3	Nordberg Crusher	1500 tph	MP800-110	MP800	1998
*307-E4	Nordberg Crusher	1500 tph	MP800-111	MP800	1998
*M307-E5	Svedala Double Deck Screen	800 tph	NA	Low Head	1998
*M307-E6	Svedala Double Deck Screen	800 tph	NA	Low Head	1998
*M307-E21	Conveyor	1968 tph	NA	Oversize	8/93
*M307-E23	Conveyor	1968 tph	NA	NA	8/93
307-E8	Surge Bin	500 tons	NA	NA	<8/25/82
307-E9	Surge Bin	500 tons	NA	NA	<8/25/82
307-E51	Surge Bin	500 tons	NA	NA	<8/25/82
V307-E10	Syntron Vibratory Feeder	656 tph	11246	F-86-D	6/61
V307-E11	Syntron Vibratory Feeder	656 tph	11247	F-86-D	6/61
V307-E52	Syntron Vibratory Feeder	656 tph	237667	F-86-D	2/67
*M307-E24	Feed Conveyor	656 tph	NA	NA	8/93
*M307-E25	Feed Conveyor	656 tph	NA	NA	8/93
*M307-E53	Feed Conveyor	656 tph	NA	NA	8/93
*307-E12	Nordberg Tertiary Crusher	656 tph	MP800-107	MP800	1998
*307-E13	Nordberg Tertiary Crusher	656 tph	MP800-108	MP800	1998
*M307-E54	Nordberg Tertiary Crusher	656 tph	MP800-109	MP800	1998
*M307-E14	Svedala Double Deck Screen	656 tph	NA	Low Head	1998
*M307-E15	Svedala Double Deck Screen	656 tph	NA	Low Head	1998
*M307-E55	Svedala Double Deck Screen	656 tph	NA	Low Head	1998
*M307-E16	Double Deck Conveyor	2500 tph	NA	NA	8/93
*307-104	Ducon Wet Scrubber	28613 cfm	66-424-A	108	<8/25/82
*307-105	Ducon Wet Scrubber	28613 cfm	66-424-B	108	<8/25/82
*307-106	Ducon Wet Scrubber	28613 cfm	65-135B	108	<8/25/82
*307-107	Ducon Wet Scrubber	28613 cfm	NA	108	<8/25/82
*307-108	Ducon Wet Scrubber	8000 cfm	NA	54	1973
*M307-E13	Feed Conveyor	2500 tph	NA	NA	8/93
*M307-E44	Feed Conveyor	2500 tph	NA	NA	8/93

M309-100	American Air Filter Wet Scrubber	25hp	K600206	Roto Clone	<8/25/82
M311-E45	Cimetta Engineering Tripper Car	2500 tph	NA	NA	6/61
310-01	Fine Ore Bins (6)	15700 tons	NA	NA	1960
311-1	Fine Ore Feeder Belts	130 tph	NA	NA	6/61
311-24	Fine Ore Feeder Belts	130 tph	NA	NA	6/61
311-60	Fine Ore Feeder Belts	130 tph	NA	NA	2/67
311-71	Fine Ore Feeder Belts	130 tph	NA	NA	2/67
M311-E25	Conveyor	350 tph	NA	NA	6/61
M311-E26	Conveyor	350 tph	NA	NA	6/61
M311-E27	Conveyor	350 tph	NA	NA	6/61
M311-E28	Conveyor	350 tph	NA	NA	2/67
M311-E72	Conveyor	350 tph	NA	NA	2/67
M311-E73	Conveyor	350 tph	NA	NA	2/67
M311-E29	Conveyor	350 tph	NA	NA	6/61
M311-E32	Conveyor	350 tph	NA	NA	6/61
M311-E74	Conveyor	350 tph	NA	NA	2/67
M311-E75	Conveyor	350 tph	NA	NA	2/67
*M311-E37	Wheelabrator Dust Collector	3412 cfm	A111115	112-D	1960
*M311-E38	Wheelabrator Dust Collector	3412 cfm	A111116	112-D	1960
*M311-E39	Wheelabrator Dust Collector	3412 cfm	A111117	112-D	1960
*M311-E40	Wheelabrator Dust Collector	3412 cfm	A111118	112-D	1960
*M311-E78	Wheelabrator Dust Collector	3412 cfm	A111119	112-D	1960
*M311-E79	Wheelabrator Dust Collector	3412 cfm	A120117	112-D	1960
311-109	Ducon Wet Scrubber	10283 cfm	C-91-1100	66	<8/25/82
311-110	Ducon Wet Scrubber	10283 cfm	NA	66	<8/25/82
311-111	Ducon Wet Scrubber	10283 cfm	NA	66	<8/25/82
North Crusher					
361-05	NICO Pan Feeder	625 tph	NA	FD-7F08	2/89
361-05A	Goodyear Conveyor	1 tph	NA	NA	<8/25/82
361-02A	Allis Chalmers Jaw crusher	15000 tpd	B-47300	Jaw	5/73
361-07	Gathering Conveyor	625 tph	NA	Undersize	5/73
362-5-3	Ducon Wet Scrubber	28613 cfm	65-135C	108	<8/25/82
362-6-3	Ducon Wet Scrubber	28613 cfm	65-135D	108	<8/25/82
362-7-3	Ducon Wet Scrubber	28613 cfm	65-135E	108	<8/25/82
361-08	Conveyor	625 tph	NA	NA	5/73
361-10	Variable Feed Conveyor	312 tph	NA	Variable	5/73
361-12	Variable Feed Conveyor	312 tph	NA	Variable	5/73
361-46	Norblo Dust Arrester	14400 cfm	NA	540-A	1973
361-15	Gathering Conveyor	625 tph	NA	NA	5/73
361-16	Crusher Feed Conveyor	650 tph	NA	NA	5/73
361-24	Simplicity Double Deck Screen	650 tph	2612-11014	NA	5/73
361-26-1	Symons Standard Crusher	443 tph	7726	Standard	5/73
361-28	Gathering Conveyor	443 tph	NA	NA	5/73
361-29	Transfer Tower Feed Conveyor	443 tph	NA	NA	5/73
361-30	Tertiary Head Hopper Feed Conveyor	443 tph	NA	NA	5/73
361-31	Head Hopper	1000 tph	NA	NA	1973
361-32	Feeder Conveyor	443 tph	NA	NA	5/73
361-33	Feeder Conveyor	443 tph	NA	NA	5/73
361-34	Simplicity Double Deck Screen	443 tph	101-S	NA	5/73
361-36	Simplicity Double Deck Screen	443 tph	102-S	NA	5/73
361-37	Shorthead Feed Conveyor	382 tph	NA	NA	5/73
361-38-1	Symons Crusher	382 tph	7756	Shorthead	5/73
361-40	Undersize Gathering Conveyor	625 tph	NA	NA	5/73
*361-42	Mill Transfer Belt	600 tph	NA	NA	2/89
*361-47	Reversible Fine Ore Bins Feed Belt	7500 tph	NA	NA	8/93
*361-48	Reversible Fine Ore Bins Feed Belt	7500 tph	NA	NA	8/93
*310-03	Fine Ore Bins (2)	15700	NA	NA	1989
*311-87	Syntron Ball Mill Feeders	150 tph	NA	F480	2/89
*311-88	Syntron Ball Mill Feeders	150 tph	NA	F480	2/89

*311-89	Syntron Ball Mill Feeders	150 tph	NA	F480	2/89
*311-90	Syntron Ball Mill Feeders	150 tph	NA	F480	2/89
*311-85	Feeder Belt	150 tph	NA	NA	2/89
*311-86	Feeder Belt	150 tph	NA	NA	2/89
*311-91	Feeder Belt	150 tph	NA	NA	2/89
*311-92	Feeder Belt	150 tph	NA	NA	2/89
*311-93	Gathering Belt	150 tph	NA	NA	2/89
*311-93A	Gathering Belt	150 tph	NA	NA	2/89
*311-94	Gathering Belt	150 tph	NA	NA	2/89
*311-95	Feeder Belt	300 tph	NA	NA	2/89
*311-96	Feeder Belt	300 tph	NA	NA	2/89
*311-99	Mikro-Pulsaire Dust Collector	6312 cfm	880498111	1005	1972
*311-101	Ducon Wet Scrubber	16899 cfm	C72-367	84	1972
South Crusher					
10-101	Allis-Chalmers Gyratory Crusher	2000 tph	B-38040	Gyratory	1/72
10-102	NICO Apron Feeder	2000 tph	8497-285	Apron	1/72
10-108	Ducon Wet Scrubber	22801 cfm	C70-356	96	1970
10-103	Conveyor	2000 tph	NA	NA	1/72
10-114	Ducon Wet Scrubber	4471 cfm	C-90-1045	42	1970
10-105	Barber Greene Radial Stacker	2000 tph	NA	GO201008	1/72
30-130	NICO Feeder	500 tph	4465-293	FD-4465	1/72
30-131	NICO Feeder	500 tph	4465-294	FD-4465	1/72
30-132	NICO Feeder	500 tph	4465-295	FD-4465	1/72
30-133	NICO Feeder	500 tph	4465-296	FD-4465	1/72
30-134	Conveyor	1000 tph	NA	NA	6/14/70
30-136	Conveyor	1000 tph	NA	NA	6/14/70
30-150	Ducon Wet Scrubber	14500 cfm	C70-356	72	12/11/70
20-250	Stockpile Feed Conveyor	600 tph	NA	NA	<8/25/82
*20-252	Syntron Vibrating Feeder	200 tph	657887	F450BDT	10/89
*20-253	Syntron Vibrating Feeder	200 tph	657889	F450BDT	10/89
*20-254	Syntron Vibrating Feeder	200 tph	657891	F450BDT	10/89
*20-251	Stockpile Reclaim Conveyor	200 tph	NA	NA	10/89
*20-255	Surge Bin Feed Conveyor	200	NA	NA	10/89
*20-257	Surge Bin	200 tph	NA	NA	10/89
*20-285	Belt Feeder Bypass (Omnicone)	200 tph	NA	NA	10/89
*20-258	Omnicone Belt Feeder	200 tph	NA	NA	10/89
*20-259	Omnicone Belt Feeder	200 tph	NA	NA	10/89
*20-262	Rexnord Omnicone Crusher	200 tph	7086	1560	10/89
*20-263	Rexnord Omnicone Crusher	200 tph	7087	1560	10/89
*20-270	Ducon Wet Scrubber	10283 cfm	C90-1045	66	8/90
*20-265	Omnicone Discharge Conveyor	200 tph	NA	NA	10/89
20-244	Grizzly Oversize Conveyor	100 tph	NA	NA	1/72
20-245	Grizzly Oversize Conveyor	100 tph	NA	NA	1/72
20-266	Recycle Conveyor	100 tph	NA	NA	1/72
20-268	Recycle Conveyor	100 tph	NA	NA	1/72
Lime Handling					
328-E6	Mission Mill Lime Bin Dust Collector	3400 cfm	A111117a	112-D	1960
60-502	South Mill Lime Bin Dust Collector	3000 cfm	72H2304	36S-8-30	2/15/73
328-E2	Mission Mill Lime Feeder Conveyor	Varies	NA	NA	1960
328-E3	Mission Mill Bucket Elevator Conveyor	Varies	NA	NA	1960
328-E9	Mission Mill REX Bucket Elevator	Varies	NA	NA	1960
328-E11	Mission Mill Lime Feed Conveyor	Varies	NA	NA	1960
NA	Mission Mill Lime Hopper	40 tons	NA	NA	1960
328-E44	Mission Mill Syntron Lime Feeder	Varies	112501	C54490	1960
NA	Mission Mill Dry Lime Bin	250 tons	NA	NA	1960
60-500	South Mill Lime Bin	100 tons	NA	NA	1972
60-600	South Mill Lime Belt	Varies	NA	NA	1972
60-601	South Mill Lime Bin Vibratory Feeder	Varies	12277	V-20	1972
By-Products Plant					

353-113	Screw Dryer	3MM Btu	NA	NA	1978
353-114	Screw Dryer	3MM Btu	NA	NA	1981
353-115	Ducon Wet Dust Collector	1600 cfm	C80-0706	IV	1980
353-119	Screw Dryer Holding Hopper	2000 lb/hr	NA	NA	1978
353-120	Screw Dryer Holding Hopper	2000 lb/hr	NA	NA	1981
353-69	Multiple Hearth Dryer	2.5MM Btu	63227	5	1964
Generators (Nonroad Engines)					
23-001	Detroit Diesel Power Generator	500 hp	NA	149TI-V12	NA
23-002	Detroit Diesel Power Generator	1100 hp	NA	149TI-V12	NA
23-003	Detroit Diesel Power Generator	2200 hp	NA	149TI-V16	NA
Diesel Fuel Storage Tank					
NA	Fuel Storage Tank	250,000 gal	NA	AST	1973
Gasoline Storage Tank					
NA	Owens-Corning Fuel Storage Tank	20,000 gal	NA	UST	1990
Zinc Melting Kettles					
NA	Mission Secondary Crusher (NG)	231K Btu/hr	NA	NA	NA
NA	North Crusher (Propane)	338K Btu/hr	NA	NA	NA
NA	Mission Secondary/North Crusher (NG)	231K Btu/hr	NA	NA	NA

PERMIT REVISION ACTIVITY LOG

Air Quality Control Permit Number 2026
 For
 ASARCO, LLC, Mission Complex

DATE	REVISION DESCRIPTION	SECTION	REVISION TYPE
April 12, 2005	Removed reference to the Overland Conveyor System. Removed equipment ID numbers 261-262, 265-272, and 276-283.	Part "B" II.D, II.G; Part "D"	Minor
April 12, 2005	Fixed typographical error (I.B.6 to I.B.5.)	Part "B" I.B.	Minor
April 12, 2005	Deleted monitoring, recordkeeping, reporting, and testing permit conditions for screw dryers (unit ID 353-113 and 353-114).	Part "B" II.M, III.B.3, IV.B.6.	Minor
April 12, 2005	Equipment ID number change to M311-E78, M311-E79, and 311-101.	Part "B" IV.A.17.a, Part "D"	Minor
April 12, 2005	Revised control measures to include water trucks, and wet tailings (smearing).	Summary, Summary of Permit Requirements, Part "B" I.C.10.a & b	Minor
April 12, 2005	Revised 40% of non-point and fugitive opacity plume or effluent to 20% per updated standards.	Summary of Permit Requirements, Part "B" I.B.5 & 6, I.C.2, II.C.5.c thru e, Part "C".	Minor
April 12, 2005	Reinstated deleted permit conditions for the dryers and roasters.	Part "B" II.M, III.B.3, IV.B.6.	Minor
April 12, 2005	Equipment ID number change to 307-E3,4,12,& 13.	Part "D"	Minor
April 12, 2005	Source name change from ASARCO Incorporated to ASARCO, LLC.	Cover sheet, Summary, Summary of Permit Requirements, Part "A", Part "B", Part "C", Part "D".	Minor

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