ROSEMONT COPPER

A Bridge to a Sustainable Future.

May 6, 2011

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PIMA COUNTY
MAY 10 2011
DEPARTMENT OF
ENVIRONMENTAL QUALITY

Mr. Mukonde Chama
Pima County Department of Environmental Quality
Air Program
33 North Stone Avenue, Suite 700
Tucson, Arizona 85701

Re: Rosemont Copper Company Draft Air Permit

Dear Mr. Chama:

Rosemont Copper Company (Rosemont) is pleased to submit the attached Draft Air Quality Operating Permit. We hope that this information proves useful in your review of our application and that it provides some insight into what we believe may be appropriate terms and conditions based on our operations.

Rosemont was able to access examples of permit terms and conditions currently in place for active mining operations. We developed this draft permit using that information so it should meet the current Pima County standards for permitting. Rosemont understands that the PDEQ is responsible for developing terms and conditions it believes will be appropriate; however, we hope that PDEQ finds this draft permit helpful as it develops Rosemont's air quality permit.

If you should have any questions regarding the draft permit provided with this letter, or if you would like an electronic copy to assist with your editing procedures, please contact me at (520) 784-1972 or via email at karnold@rosemontcopper.com.

Sincerely,

Katherine Ann Arnold, P.E.
Vice President, Environmental & Regulatory Affairs

cc: Eric Hiser
File

Doc. No. 047/11-15.10.1.10

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PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR PROGRAM

33 N. Stone Avenue, Suite 700 • Tucson, Arizona 85701 • Phone: (520) 243-7400

AIR QUALITY OPERATING PERMIT

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

ISSUED TO

ROSEMONT COPPER COMPANY
P.O. BOX 35130
TUCSON, ARIZONA 85740-5130

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

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

PERMIT NUMBER PERMIT CLASS

ISSUED: _____ EXPIRES: _____

SIGNATURE TITLE

SUMMARY

(INSERT SUMMARY)

DRAFT

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PART A: GENERAL PROVISIONS

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

INSERT GENERAL PROVISONS

DRAFT PERMIT

PART B: SPECIFIC PROVISIONS

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

I. APPLICABILITY

Affected Emission Source or Process: **Minor Source**

INSERT SUMMARY

Section 1 Crushing and Concentrating

Equipment Group NSPS	Emission Points
Crusher	PCr: H-H-CDp, H-CDs, PCr, F-CD; PbC: F-PbC, PbC, CV-PB3
Screens	Sn-T, Sn-PbW, Sn-FFT, Ft-CC1 to CC4, Ft-MCD
Conveyor Belt Transfer Points	F-CD to CV-SF, CV-SF to CV-ST, F-R1 to F-R4 to CV-R, CV-R to CV-SMF, CV-Pb1 to Sn-PbW, Sn-PbW to CV-Pb2, CV-Pb2 to B-SAGOS, CV-Pb2 to CV-Pb3, B-SAGOS to F-PbC, F-PbC to PbC, CV-Pb3 to CV-SMF, Pt-CC1 to CC4 to CV-CC, H-MC to CV-MC, CV-MC to MPS
Bins	B-SAGOS, B-MC, H-MC
Enclosed Storage Areas	Coarse Ore Storage, Copper Concentrate Loadout Building
Product Packaging	MPS
Truck Unloading Station	Truck dump to H-CDp
Feeders	F-R1 to R4, F-PbC
Conveyors	CV-SF, CV-ST, CV-R, CV-SMF, CV-Pb1, CV-Pb2, CV-Pb3, CV-MC,
Moly Concentrate Dryer	D-MC
NSPS Control Devices	PC-CAS, PC-SAS, PC-RTS, PC-PCAS, PC-CCS1, PC-CCS2, PC-MS, PC-EP, PC-MPC, PC-MCAS

Non-Emitting Equipment Group Non-NSPS	Emission Points
Pumps	PB-PbW, PB-CF, PB-CRCF, PB-CCF, PB-C2CF, PB-MRCyF, PB-MCCF
Mills	M-SAG, M-B1, M-B2, M-CR1, M-CR2, M-MR, M-MCR
Flotation Cells	FC-R1 to R8, FC-R9 to R16, FC-C1C1 to C1C4, FC-C1CS1 to C1CS5, CC-C2C1 to C2C2, FC-MS1 to MS6, FC-M1C1 to M1C4, CC-M2C, CC-M3C
Wet Cyclones	Cy-M1, Cy-M2, Cy-CR, Cy-MR, Cy-MC, Cy-MCR
Thickeners and Tanks	Th-BC, T-CTO, Th-CC, T-CC1 to CC2, T-CCF, T-MFF, T-TTO, T-SXF
Truck Loading Station	Copper Concentrate
Screens	Ft-T1 to T14
Conveyors	F-T1 to T14 to CV-TD, CV-TD to CV-F1, CV-F1 to CV-F2, CV-F2 to Tailing Conveying and Stacking Systems, CV-BPLS

Leaching Tanks	T-RA, T-OS, T-RO, T-LO, T-E1S,T-E1S, T-E1P, T-E1T, T-E1PS, T-E1PP, T-E1PT, T-E2S, T-E2P, T-E2T, T-S1S, T-S1P
Leaching Settler	ES-E1, ES-E1P, ES-E2, SS-S1
Coarse Ore Stockpile Tripper	CV-ST to Course Ore Stockpile
Copper Concentrate Stacker	
Copper Concentrate Truck Loading	
Air Pollution Control Devices	PC-BPLBV
Material Handling	S-BPL, T-MFF, HOH, B-MC

Section 2 Tailings and Mining Operations

Equipment Group	Emission Points
Conveyors	CV-TD, CV-F1, CV-F2, CV-R1, CV-S1, CV-BW1 to CV-BW4, CV-SP1 to CV-SP2, CV-R2, CV-S2, CV-BW5 to CV-BW8, CV-SP3 to CV-SP4
Feeders	F-T1 to T14
Drilling and Blasting	
Loading and Hauling	
Material Handling	TL, Th-T1, Th-T2
Tanks	T-TFS, T-TFF1/TFF8, T-TTO

Section 3 Ancillary

Equipment Group	Emission Points
Generators	HWG, PermEG
Tank Emissions	T-C7D, T-MIBCS, T-DFS-HV1, T-DFS-HV2

Part B

Section 1

Table 1. Crushing and Concentrating

Group	Process	Equipment #	Reference
NSPS	Crushers	PCr: H-CDp, HCDs, PCr, F-CD	I.A.1.; I.B.1-3.; II.A.1.; II.B.1-2.; III.A-B.; IV.A-C.; V.A-B.
		PbC: F-PbC, PcB, CV-Pb3	
	Screens	Sn-T, Sn-PbW, Sn-FFT, Ft-CC1 to CC4, Ft-MCD	
	Conveyor Belt Transfer Points	F-CD to CV-SF	
		CV-SF to CV-ST	
		F-R1 to F-R4 to CV-R	
		CV-R to CV-SMF	
		CV-Pb1 to Sn-PbW	
		Sn-PbW to CV-Pb2	
		CV-Pb2 to B-SAGOS	
		CV-Pb2 to CV-Pb3	
		B-SAGOS to F-PbC	
		F-PbC to PbC	
		CV-Pb3 to CV-SMF	
		Ft-CC1 to CC4 to CV-CC	
		H-MC to CV-MC	
		CV-MC to MPS	
	Bins	B-SAGOS, B-MC, H-MC	
	Enclosed Storage Areas	Coarse Ore Storage	
		Copper Concentrate Loadout Building	
	Product Packaging	MPS	
	Truck Unloading Station	Truck dump to H-CDp	
	NSPS Control Device	PC-CAS, PC-SAS, PC-RTS, PC-PCAS, PC-CCS1, PC-CCS2, PC-MCAS, PC-MS, PC-EP, PC-MDC	
	Process	**Equipment #**	**Reference**
Non-NSPS	Pumps	PB-PbW, PB-CF, PB-CRCF, PB-CCF, PB-C2CF, PB-MRCyF, PB-MCCF	I.A.1.; I.C.1-3.; II.A.1-2.; II.C.1-2.; III.A-C.; IV.A-C.; V.A-B.
	Mills	M-B1, M-B2, M-CR1, M-CR2, M-MR, M-MCR	
	Wet Cyclones	Cy-M1, Cy-M2, Cy-CR, Cy-MR, Cy-MC	

	Process	Equipment #	Reference
Non-NSPS	Flotation Cells	Roughers: FC-R1 to R8, FC-R9 to R16, FC-C1c to C1C4, FC-C1CS1 to C1CS5, CC-C2C2 to C2C2, FC-MS1 to MS6, FC-M1C1 to M1C4, CC-M2C, CC-M3C	
	Thickeners and Tanks	Th-BC, T-CTO, Th-CC, T-CC1 to CC2, T-MFF,T-CCF, T-TTO, T-SXF	
	Truck Loading Station	Copper Concentrate	
	Screens	Ft-T1 to T14	
	Conveyors	F-T1 to T14 to CV-TD	
	Conveyors Leaching Tanks	CV-TD to CV-F1	
		CV-F1 to CV-F2	
		CV-F2 to Tailing Conveying and Stacking Systems, CV-BPLS	
		T-RA, T-OS, T-RO, T-LO, T-E1S,T-E1S, T-E1P, T-E1T, T-E1PS, T-E1PP, T-E1PT, T-E2S, T-E2P, T-E2T, T-S1S,T-S1P	
	Leaching Settler	ES-E1, ES-E1P, ES-E2, SS-S1	
	Course Ore Stockpile Tripper	CV-ST to Course Ore Stockpile	
	Moly Concentrate Dryer	D-MC	

I. Emission Limitations and Standards

A. General – Conditions apply to all equipment in Table 1.

1. 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 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 in time, and in no case shall two sets overlap. If the average opacity of the set of 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.

B. NSPS – Conditions apply to Group NSPS

1. The Permittee shall not cause to be discharged into the atmosphere any stack emissions that:

a. Contain particulate matter in excess of 0.05 grams per dry standard cubic meter. This condition applies to all NSPS Air Pollution Control Equipment listed in Table [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 condition applies to air pollution control equipment PC-EP and PC-MDC. [This is a Material Permit Condition] [40 CFR 60.382(a)(2)]

2. On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from an affected facility any process fugitive emissions that exhibit greater than 10 percent opacity. This condition applies to all NSPS Equipment listed in Table 1. [40 CFR 60.382(b)]

3. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Control Officer which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)] [Material Permit Condition]

C. Conditions Applicable to Non-NSPS Equipment

1. Particulate Limits

a. 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]

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

$E = 3.59P^{0.62}$
where:
E = the maximum, allowable particulate emission rate in pounds-mass per hour.
P = the process weight rate in tons-mass per hour.

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

$E = 17.31P^{0.16}$
where "E" and "P" are defined as indicated in I.B.1.a of this Part.

b. 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]

c. For purposes of C.1.a.(1) and (2), 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. Equipment is similar if it is in the same process group on Table 1. [This Condition Is Not Federally Enforceable][PCC 17.16.360.D]

2. Opacity Limit. After April 23, 2006, the permittee shall not allow greater than 20% opacity in any area that is attainment or unclassifiable for each particulate matter standard except as provided in subsections 17.16.130.D & E.
[PCC 17.16.040] [PCC 17.16.130.B]

3. Material Handling

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

b. Dust emissions from the processing of material must be minimized by hooding and use of dust collection equipment, water, sprays, or use of wet scrubbers, fabric filters (baghouses), electrostatic precipitation, or other equivalently effective controls. [SIP Rule 316.A]

c. 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 17.16.090.G and 17.16.100.C]

d. 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 & PCC 17.16.110.A]

e. 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 Condition I.C.2 of this Section. [PCC 17.16.110.B] [Locally Enforceable Condition]

4. Reasonable Precautions

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

b. 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 & PCC 17.16.050.D]

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

(2) 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.

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

c. [WE WILL LIST ROSEMONT's SPECIFIC REASONABLE PRECAUTIONS HERE]

II. Monitoring Requirements

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

1. Biweekly Source Monitoring. Biweekly (every two weeks) monitoring of emissions from sources subject to I.A, I.B, and I.C, and I.E. is required as follows.

a. No later than 180 days of the issuance of this permit, the Permittee shall submit a Visual Observation Plan (VOP) to be approved by the control officer. The VOP

shall identify observation points, as appropriate, for (i) each air pollution control device outlet exhausting to ambient air; (ii) building containing emissions units; (iii) any emission units located outside buildings; and (iv) each the non-point sources shall be monitored. All the sources associated with each observation point shall be specifically identified within the VOP. Any changes to the VOP 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 in accordance with the VOP. 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 emissions that, on an instantaneous basis, appears to exceed the opacity limit in Condition I.A.1, I.B.1.b., I.B.2. or I.C.2, as applicable, then the observer shall, if practicable, take a six-minute Method 9 observation of the plume.

d. If the six-minute opacity of the emissions at any point is less than the applicable opacity standard, 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 emissions exceeds the opacity standard in Condition I.A.1, I.B.1.b, I.B.2, or I.C.2, as applicable, then the Permittee shall do the following:

(1) Adjust or repair the controls or equipment to reduce the opacity to less than the applicable standard;

(2) Record the corrective action taken; and

(3) Report it as excess emissions.

B. Additional Monitoring for Air Pollution Control Devices

1. This condition applies to the following wet scrubbers: PC-CAS, PC-SAS, PC-RTS, PC-PCAS, PC-CCS1, PC-CCS2, PC-MS, PC-MCAS.

a. The Permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the change in pressure of the gas stream through the scrubber for any affected facility using a wet scrubbing emission control device. The monitoring device must be certified by the manufacturer to be accurate within ±250 pascals (±1 inch water) gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.
[40 CFR 60.384(a)] [Material Permit Condition]

b. The Permittee shall 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. [40 CFR 60.384(b)] [Material Permit Condition]

c. During the initial performance test of a wet scrubbers, 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)]

2. Monitoring for D-MC, PC-ER and PC-MDC shall be conducted in accordance with the bi-weekly visual observation monitoring specified in condition II.A.

III. Recordkeeping Requirements

A. General – Conditions apply to all equipment in Table 1.

1. The Permittee shall maintain records of:

a. The VOP and all revisions.

b. All records of visual observations, Method 9 observations, and corrective actions taken pursuant to the VOP.

B. Equipment subject to Condition II.B.1. The permittee shall record weekly the change in pressure of the gas stream across the scrubber and scrubbing liquid flow rate for each wet scrubber subject to Condition II.B.1

C. Process weight. The owner or operator of any mining property subject to the provisions of this section shall record the daily process rates and hours of operation of all material handling facilities. [PCC 17.16.360.F]

IV. Reporting Requirements

A. VOP Reporting.

1. No later than the 28th day of July for the prior January 1 through June 30 and no later than January 28th for the prior July 1 through December 30, or any part thereof, the Permittee shall report to the control officer:

a. The date and time of any opacity limit exceedance, the equipment or activity involved, the corrective action taken, and the duration of the exceedance, if known.

b. Any bi-weekly period where the required observations were not taken and, if so, the reason for the missed observation.

c. Any other deviation from the VOP and an explanation for the deviation.

B. NSPS Equipment.

1. The owner or operator subject to the provisions of this subpart shall submit to the Control Officer a written report of the results of the test as specified in 40 CRF 60.8(a). [40 CFR 60.385(a)]

2. After the initial performance test of a wet scrubber, the owner or operator shall submit semiannual reports to the Control Officer of occurrences when the measurements of the scrubber pressure loss (or gain) or liquid flow rate differ by more than ±30 percent from the average obtained during the most recent performance test. [40 CFR 60.385(c)]

3. The reports required under IV.B of this subpart shall be postmarked within 30 days following the end of the second and fourth calendar quarters. [40 CFR 60.385(d)]

C. Emission Test Reporting.

1. The owner or operator required to test by this permit and not reporting pursuant to Condition IV.B shall submit to the Control Officer a written report of the results of the test within thirty days of completing the test.

V. Testing Requirements

A. General – Conditions apply to all equipment in Table 1.

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

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

B. The Permittee shall periodically determine compliance with the particulate matter standards in I.B.1 of this Section as follows: [40 CFR 60.386(b)]

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

2. Method 5 or 17 shall be used to determine the particulate matter concentration. The sample volume for each run shall be at least 1.70 dscm (60 dscf). The sampling probe and filter holder of Method 5 may be operated without heaters if the gas stream being

sampled is at ambient temperature. For gas streams above ambient temperature, the Method 5 sampling train shall be operated with a probe and filter temperature slightly above the effluent temperature (up to a maximum filter temperature of 121°C (250°F)) in order to prevent water condensation on the filter. [40 CFR 60.386(b)(1)]

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

4. To comply with IV.B of this Section, the Permittee shall use the monitoring devices in II.B.2 and II.B.3 of this Section to determine the pressure loss of the gas stream through the scrubber and scrubbing liquid flow rate at any time during each particulate matter run and the average of the three determinations shall be computed. [40 CFR 60.386(c)]

DRAFT PERMIT

Part B

Section 2

Table 2. Mining Operations and Tailing Management

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

Process/Unit Descriptions	Emission Point Numbers
Conveyors	CV-TD, CV-F1, CV-F2, CV-R1, CV-S1, CV-BW1 to CV-BW4, CV-SP1 to CV-SP2, CV-R2, CV-S2, CV-BW5 to CV-BW8, CV-SP3 to CV-SP4
Feeders	F-T1 to F-T14
Drilling and Blasting	
Loading and Hauling	
Material Handling	TL, Th-T1, Th-T2
Tanks	T-TFS, T-TFF1 to T-TFF8, T-TTO

I. Emission Limitations and Standards

A. Facilities subject to Pima County Code 17.16.360 - Standards of Performance for Nonferrous Metals Industry Sources. The provisions of this Section are applicable to point sources at the following affected facilities: CV-TD, CV-F1, CV-F2, CV-R1, CV-S1, CV-BW1 to CV-BW4, CV-SP1 to CV-SP2, CV-R2, CV-S2, CV-BW5 to CV-BW8, CV-SP3 to CV-SP4, TL, Th-T1, Th-Ts.

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.

c. 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]

d. For purposes of I.A.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. Equipment is similar if it is grouped together in Table 2. [This Condition Is Not Federally Enforceable][PCC 17.16.360.D]

B. General Visibility Limiting Standards

1. 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]

2. 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.

3. 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 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 in time, and in no case shall two sets overlap. If the average opacity of the set of exceeds the maximum allowed by any rule, this shall constitute a violation.

4. The use of air or other gaseous diluents solely for the purpose of achieving compliance with an opacity standard is prohibited.

5. 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.

C. Material Handling Conditions.

1. 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]

2. 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 bears, 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]

3. 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 17.16.090.G and 17.16.100.C]

4. 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]

5. 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]

6. 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.

7. Open fires permitted according to Chapter 17.12 are exempt from the requirements of I.B.2 through 5 of this Part. [PCC 17.16.040.C]

D. Requirements for Open Areas, Roadways, Streets, Material Handling, Storage Piles, and Tailings. [PCC 17.16.055]

1. 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]

2. 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.

II. Monitoring Requirements

A. Facilities subject to Condition I.A. The Permittee shall monitor the daily process rates and hours of operation of all material handling facilities. [PCC 17.16.360.F]

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

1. Biweekly Source Monitoring. Biweekly (every two weeks) monitoring of emissions from sources subject to I.B, I.C, and I.D. is required as follows.

a. No later than 180 days of the issuance of this permit, the Permittee shall submit a Visual Observation Plan (VOP) to be approved by the control officer. The VOP shall identify observation points, as appropriate, for (i) each air pollution control device outlet exhausting to ambient air; (ii) building containing emissions units; (iii) any emission units located outside buildings; and (iv) each the non-point sources shall be monitored. All the sources associated with each observation point shall be specifically identified within the VOP. Any changes to the VOP 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 in accordance with the VOP. 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 emissions that, on an instantaneous basis, appears to exceed the opacity limit in Condition I.B.1., as applicable, then the observer shall, if practicable, take a six-minute Method 9 observation of the plume.

d. If the six-minute opacity of the emissions at any point is less than the applicable opacity standard, 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 emissions exceeds the opacity standard in Condition I.B.1.,, as applicable, then the Permitteer shall do the following:

(1) Adjust or repair the controls or equipment to reduce the opacity to less than the applicable standard;

(2) Record the corrective action taken; and

(3) Report it as excess emissions.

C. Sources Subject to I.B. through I.D. of This Part.

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.B.4 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. through 6 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.B. through I.D. 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 on 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.B.4 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.

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

1. 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.

2. 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.

3. The Permittee shall monitor to ensure that vehicular speed limits are posted and observed at no more than 25 mph.

E. 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.

III. Recordkeeping Requirements

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

1. The Permittee shall record the daily process rates and hours of operation of all material handling facilities.

2. The Permittee shall maintain the records produced in II.A. 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]

IV. Reporting Requirements

A. 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.

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.]

a. 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).

V. Testing Requirements

Part B

Section 3

Ancillary

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Attachment 1

Applicable Regulations

Requirements Specifically Identified as Applicable:

Code of Federal Regulations Title 40:

Part 60 Subpart LL	New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants

Pima County State Implementation Plan (SIP):

Rule 224	Fugitive Dust producing Activities
Rule 334	Petroleum Liquids
Rule 315	Roads and Streets
Rule 316	Particulates Materials
Rule 321	Opacity Standards and Applicability
Rule 332	Compilation of Mass Rates and Concentrations
Rule 343	Visibility Limiting Standard

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

17.16.040	Visible Emission Standards: Standards and applicability (Include NESHAP)
17.16.050	Visibility Limiting Standards
17.16.050.A.	Facility-wide
17.16.050.B.	Facility-wide for non-point sources only
17.16.050.C.	Facility-wide for non-point sources only
17.16.050.D.	Facility-wide, except as set forth in other sections
17.16.060	Fugitive Dust Producing Activities
17.16.090	Roads and Streets
17.16.100	Particulate Materials
17.16.110	Storage Piles
17.16.120	Mineral Tailings
17.16.130	NSPS Applicability
17.16.140	Compilation of mass rates and concentrations
17.16.160	Standards of Performance for Fossil-Fuel Fired Steam Generators and General Fuel Burning Equipment
17.16.340	Standards of Performance for Stationary Rotating Machinery
17.16.360	Standards of Performance for Nonferrous Metals Industry Sources

Attachment 2

Equipment List

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Attachment 3

Schedule of Performance Tests

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