

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AIR QUALITY CONTROL MINOR PERMIT

Permit AQ0406MSS05
Rescinds Permit AQ0406MSS04

Preliminary – August 18, 2010

The Alaska Department of Environmental Conservation (Department), under the authority of AS 46.14 and 18 AAC 50, issues Air Quality Control Minor Permit AQ0406MSS05 to the Permittee listed below.

Operator and Permittee: **Sumitomo Metal Mining Pogo, LLC**
P.O. Box 145
Delta Junction, AK 99737

Owner: Sumitomo Metal Mining Pogo, LLC

Stationary Source Pogo Mine

Location: Latitude: 64°27'13.2''N; Longitude: 144°54'14.6''W

Physical Address: Goodpaster River, AK

Permit Contact: Sally McLeod, (907) 895-2879

Project: Revise AQ0406MSS04

This project is classified under 18 AAC 50.508(6) for revising or rescinding the terms and conditions of a Title I permit. The permit satisfies the obligation of the Permittee to obtain a minor permit under 18 AAC 50.

This permit authorizes the Permittee to operate under the terms and conditions of this permit, and as described in the original permit application and subsequent application supplements listed in Section 11 except as specified in this permit.

The Permittee shall operate under the terms and conditions of this minor permit upon issuance.

John F. Kuterbach
Manager, Air Permits Program

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Section 1. Emission Unit Inventory

1. Emission Units Authorization. Emission units listed in **Table 1** have specific monitoring, record keeping, or reporting conditions in this permit. Except as noted elsewhere in the permit the information in **Table 1** is for information purposes only. The specific unit descriptions do not restrict the Permittee from replacing an emission unit identified in **Table 1**. The Permittee shall comply with all applicable provisions of AS 46.14 and 18 AAC 50 when installing a replacement emission unit, including any applicable minor or construction permit requirements.

Table 1: Minor Permit Emission Unit Inventory

ID	Type	Description	Rated Capacity	Fuel	Max. Operation
102	Various Heaters	Lower Camp	0.6 MMBtu/hr	Propane	8,760 hr/hr
104	Various Heaters	Water Treatment Plant	3.2 MMBtu/hr	Diesel	8,760 hr/yr
106	Various Heaters	Mill Building	17.9 MMBtu/hr	Diesel	8,760 hr/yr
107	Various Heaters	Filter/Backfill Plant	6.8 MMBtu/hr	Diesel	8,760 hr/yr
108	Various Heaters	Permanent Camp	11.4 MMBtu/hr	Diesel	8,760 hr/yr
110	Various Heaters	Truck Shop Complex	6.3 MMBtu/hr	Diesel	8,760 hr/yr
111	Heater	Sewage Treatment Plant	1.7 MMBtu/hr	Diesel	8,760 hr/hr
112	Heater	Environmental Field Office	0.075 MMBtu/hr	Diesel	8,760 hr/yr
113	Heater	Portable Water Treatment	0.04 MMBtu/hr	Diesel	8,760 hr/yr
114	Various Heaters	Redpath Construction Offices	0.3 MMBtu/hr	Diesel	8,760 hr/yr
116	Various Heaters	Lower Warehouse	1.3 MMBtu/hr	Diesel	8,760 hr/yr
118	Various Heaters	1875 Portal Shop	0.368 MMBtu/hr	Diesel	8,760 hr/yr
119	Various Heaters	Mill Bench Maintenance Office	0.76 MMBtu/hr	Diesel	8,760 hr/yr
208	Cummins QSXT15-G9 Generator	Mill Bench Bank Unit No. 1	70.8 gal/MW-hr	Diesel	185,000 gal/yr
209	Cummins QST30-G5 Generator	Mill Bench Bank Unit No. 2	70.8 gal/MW-hr	Diesel	
210	Cummins QST30-G5 Generator	Mill Bench Bank Unit No. 3	70.8 gal/MW-hr	Diesel	
220	CAT 3516C Engine	Lower Camp	69.6 gal/MW-hr	Diesel	
221	CAT C15 Engine	Lower Camp	81.7 gal/MW-hr	Diesel	
218	Fi-Fi Pump Engine	Permanent Fire Water Pump Building	165 bhp	Diesel	200 hr/yr
302	Explosives (Underground)	Exhaust from 1690 Portal	7,150 lb/day	N/A	365 days/yr
411	Incinerator	Permanent Camp	170 lb/hr	Solid Waste	745 tpy
414	Heater	1525 Mine Air Heater	42.2 MMBtu/hr	Propane	3 MMgal/yr
415	Heater	1876 Mine Air Heater	42.2 MMBtu/hr	Propane	
542	Propane Vaporizer	1875 Portal	1.0 MMBtu/hr	Propane	
543	Propane Vaporizer	1875 Portal	1.0 MMBtu/hr	Propane	
544	Propane Vaporizer	1520 Portal	1.0 MMBtu/hr	Propane	
545	Propane Vaporizer	1525 Portal	1.0 MMBtu/hr	Propane	
416	Heater	Portable Indirect Fired Heater	1.0 MMBtu/hr	Diesel	8,760 hr/yr
	Isuzu 3LD1	Blower Engine	19 bhp	Diesel	8,760 hr/yr
417	Heater	Portable Indirect Fired Heater	1.0 MMBtu/hr	Diesel	8,760 hr/yr
	Isuzu 3LD1	Blower Engine	19 bhp	Diesel	8,760 hr/yr
418	Six Heaters	Six Portable Indirect Fired Heaters	6.0 MMBtu/hr	Diesel	8,760 hr/yr
528	Baghouse	Underground Apron Feeder	2,500 cfm	N/A	8,760 hr/yr

		No. 1			
532	Baghouse	Backfill Plant Cement Silo	750 cfm	N/A	8,760 hr/yr
532A	Baghouse	Cement Screw Conveyor	3,000 cfm	N/A	8,760 hr/yr
533	Baghouse	Conveyor to Surface Coarse Ore Bin/Above Ground	1,500 cfm	N/A	8,760 hr/yr
534	Baghouse	Surface Coarse Ore Bin Apron Feeder/Above Ground	5,000 cfm	N/A	8,760 hr/yr
534A	Bin	Surface Coarse Ore Bin	1,000 tph	N/A	8,760 hr/yr
534B	Conveyor	Conveyor to SAG Mill/ Above Ground	150 tph	N/A	8,760 hr/yr
534C	Screen	Gravity Feed Screens (two)	500 tph	N/A	8,760 hr/yr
534D	Screen	Trash Screen	15 tph	N/A	8,760 hr/yr
534E	Screen	Safety Screen	15 tph	N/A	8,760 hr/yr
534F	Tank Exhaust	Electrowinning cell	4,500 cfm	N/A	8,760 hr/yr
534G	Tank Exhaust	Acid Wash Tank	500 cfm	N/A	8,760 hr/yr
534H	Tank Exhaust	Reagent Tank	1,750 cfm	N/A	8,760 hr/yr
534I	Tank Exhaust	Liming and Mixing Tank	500 cfm	N/A	8,760 hr/yr
534J	Tank Exhaust	Cyanide Mixing and Holding Tank	750 cfm	N/A	8,760 hr/yr
535	Roads	Haul Truck-BF Plant to Drystack	N/A	N/A	8,760 hr/yr
536	Roads	Haul Truck-Waste Stockpile to Drystack	N/A	N/A	8,760 hr/yr
537	Roads	Misc. Pickup Truck Trips	N/A	N/A	8,760 hr/yr
538	Roads	Misc. Cargo Truck Trips	N/A	N/A	8,760 hr/yr
539	Roads	Misc. Bus Trips	N/A	N/A	8,760 hr/yr
540	Ducon Venture Packed Tower Scrubber	Smelting Furnace	2,500 cfm	N/A	8,760 hr/yr
541	Lochhead-Haggerty Scrubber	Electric Carbon Kiln	800 cfm	N/A	8,760 hr/yr
ALAB	Baghouse	Assay Lab	8,500 cfm	N/A	8,760 hr/yr
ALAB2	Scrubber	Assay Lab	4,000 cfm	N/A	8,760 hr/yr
ALAB3	Scrubber	Assay Lab	1,000 cfm	N/A	8,760 hr/yr
ALAB4	Baghouse	Assay Lab	10,000 cfm	N/A	8,760 hr/yr
CP	Portable Crusher	Portable Crusher	125 tph	N/A	8,760 hr/yr
CG	Cement Guppies	Cement Guppies	22 tpd	N/A	365 days/yr

Section 2. State Emission Standards for Industrial Processes and Fuel Burning Equipment

- 2. Visible Emissions.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from Emission Units 102, 104, 106-108, 110-114, 116, 118, 119, 208-210, 218, 220, 221 302, 414-418, 540-545, ALAB-ALAB4, CP, and CG listed in **Table 1** to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.
 - 2.1 For the diesel fired generator Units 208-210 and 220, and 221, Incinerator Unit 411, baghouse Units 528, 532A, 533, 534, ALAB, scrubber Units 540, ALAB2, ALAB4, ELAB, CP (portable crusher), and CG (cement guppies) monitor, record and report as described in Section 5.
 - 2.2 For Emission Units 102, 414, 415, and 542 through 545 (liquefied petroleum gas (LPG) –fired units), burn only LPG (includes propane) as fuel. Monitor by certifying in each operating report under Condition 34 whether each of these emission units burned only LPG. Report under Condition 33 if any fuel is burned other than LPG.
- 3. Particulate Matter.** The Permittee shall not cause or allow PM emitted from Emission Units 102, 104, 106-108, 110-114, 116, 118, 119, 208-210, 218, 220, 221, 302, 414-418, 540-545, ALAB-ALAB4, CP, and CG listed in **Table 1** to exceed 0.05 grains per dry standard cubic foot (gr./dscf) of exhaust gas corrected to standard conditions and averaged over three hours.
 - 3.1 For Units 208, 209, 210, 220, and 221 (diesel fired generators), Units 528, 532A, 533, and 534, ALAB (baghouses), Units 540, 541, ALAB2, ALAB3 and (scrubbers), monitor, record and report as described in Section 5.
 - 3.2 For Unit 302 (explosives), Unit CP (portable crusher), and Unit CG (cement guppies) comply with the requirements of Condition 39.
- 4. Sulfur Compound Emissions.** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO₂, from Emission Units 102, 104, 106-108, 110-114, 116, 118, 119, 208-210, 218, 220, 221, 302, 414-418 , listed in **Table 1** to exceed 500 parts per million (ppm) averaged over three hours.
 - 4.1 For Emission Units 104, 106-108, 110-114, 116, 118, 119, 208-210, 218, 220, 221, 416-418 use only fuel with a sulfur content less than 0.3 percent by weight. Verify compliance as required by Condition 9.1a and 9.2.
 - 4.2 For Emission Units 102, 414, 415, and 542-545, use only LPG as fuel. Verify compliance as required by Condition 9.2.

State Emission Standards for the Incinerator

- 5. Incinerator Visible Emissions.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, through the exhaust of Emission Unit 411 (incinerator), to reduce visibility by more than 20 percent averaged over any six consecutive minutes. Monitor, record and report as described in Section 5.

Section 3. Requirements to Avoid Title V Permitting

- 6. Fuel Limit for Emission Units 208 through 210, 220, and 221.** For Emission Units 208 through 210, 220, and 221, the Permittee shall limit combined fuel consumption to 185,000 gallons of diesel fuel per 12 consecutive months during operation. Monitor, record and report as follows:
 - 6.1 Install a dedicated continuous fuel monitoring system for recording fuel consumption that is accurate to within two percent on each unit or combined units.
 - 6.2 Using the fuel monitoring system required under Condition 6.1, track and record the monthly fuel consumption for Emission Units 208 through 210, 220, and 221. By the 15th of each month, calculate and record the monthly fuel consumption in gallons for the previous month, and add to the total for the previous 11 months to get the 12 month rolling total.
 - 6.3 Report as excess emissions under Condition 33 if the fuel consumption calculated under Condition 6.1 exceeds the limit in this condition.
- 7. Fuel Limit for Emission Units 414 and 415, and 542 through 545.** For Emission Units 414 and 415, and 542 – 545, the Permittee shall limit the combined propane fuel usage to no more than 3,000,000 gallons per 12 consecutive months during operation. Monitor, record and report as follows:
 - 7.1 Install a fuel monitoring system that is accurate to within two percent for Emission Units 414 and 415, and 542 – 545. Track and record the monthly fuel consumption for Emission Units 414 and 415, and 542 – 545. By the 15th of each month, calculate and record the monthly fuel consumption in gallons for the previous month, and add to the total for the previous 11 months to get the 12 month rolling total.
 - 7.2 Report as excess emissions under Condition 33 if the fuel consumption calculated under Condition 7.1 exceeds the limit in this condition.
- 8. Hour Limit.** For Emission Unit 218, the Permittee shall limit the hours of operation to no more than 200 hours per 12 consecutive months during operation.
 - 8.1 Before initial start up of Emission Unit 218, equip the unit with a dedicated engine hour meter.
 - 8.2 Record the hour-meter reading no less than once each calendar month after start up of Emission Unit 218.
 - 8.3 Report as set out in Condition 34, the hourly operation per 12 consecutive months.
- 9. SO₂ Limit.** The Permittee shall restrict fuel sulfur content as follows:
 - 9.1 For Emission Units 104, 106-108, 110-114, 116, 118, 119, 208-210, 218, 220, 221, 410, 411, 416, 417, and 418 (all diesel fuel-fired units), do not allow diesel fuel sulfur content to exceed 0.3 percent by weight at any time.
 - a. For diesel fuel:

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- (i) Monitor the fuel sulfur by
 - (A) testing the sulfur content for each shipment of fuel oil delivered to the source by using methods described in 18 AAC 50.035; or
 - (B) obtaining test results showing the sulfur content of the fuel from the supplier or refinery for each shipment delivered to the source; the test results must include a statement signed by the supplier or refinery of what the fuel represents.
 - (ii) Include in the operating report required under Condition 34, the test results of the fuel sulfur content for fuel received at the stationary source during the reporting period

9.2 For Emission Units 102, 414, 415, and 542-545 use only LPG as fuel. Monitor by certifying in each operating report required in Condition 34 whether or not each of these emission units fired only LPG during the reporting period.

- 10. Affirmation of Title V Avoidance.** The Permittee shall affirm annually, in accordance with 18 AAC 50.205, whether the stationary source is still accurately described by the minor permit application and this minor permit, and whether the owner or operator has made changes that would trigger the requirements for a new permit under 18 AAC 50.

Section 4. Ambient Air Quality Protection Requirements

- 11. Public Access Control Plan.** The Permittee shall comply with the provisions of the Public Access Control Plan contained in the application dated April 2003 and as follows:
- 11.1 The ambient air boundary shall be completely within the Millsite Lease Boundary established by the Alaska Department of Natural Resources.
 - 11.2 Do not revise the ambient air boundary without Department approval. Submit changes to the ambient air boundary, along with a revised ambient air impact analysis, to the Department prior to any changes in the ambient air boundary.
 - 11.3 Do not revise the Public Access Control Plan without Department concurrence. Submit revisions to the Public Access Control Plan (other than changes to the Ambient Air Boundary) to the Department’s compliance assurance group described in Condition 30 with a copy to the Department’s Title I Permit Group at 410 Willoughby Avenue Suite 303, Juneau, AK 99811-1800, ATTN: Alan Schuler, for approval prior to implementing changes to the plan.
- 12. General Ambient Air Requirements.** The Permittee shall:
- 12.1 Use water spray dust controls after blasting when dust is observed as specified under Condition 15.2.
- 13. Specific Requirements to Protect the NO₂ Increment.** The Permittee shall:
- 13.1 Limit the annual fuel consumption for Emission Units 208 through 210, 220, and 221, as required in Condition 6 ; and
 - 13.2 Limit the annual fuel consumption for Emission Units 414 and 415, and 542 – 545, as required in Condition 7 .
- 14. SO₂ Standards and Increments.** The Permittee shall restrict the fuel sulfur content as described in Condition 9.

Section 5. Visible Emissions and PM Monitoring, Recordkeeping and Reporting

Diesel-Fired Generators (Units 208 through 210, 220 and 221), Incinerator (Unit 411), Baghouses (Units ALAB, ALAB4), Scrubbers (Units 540, 541, ALAB2, ALAB3), Explosives (Unit 302), Crusher (Unit CP), and Cement Guppies (CG) are subject to this section.

15. Visible Emissions Monitoring. The Permittee shall observe the exhaust of Units 208 through 210, 220, 221, 302, 411, 540, 541, ALAB, and ALAB2 through ALAB4, CP, and CG for visible emissions using either the Method 9 Plan under Condition 15.1 or the Smoke/No-Smoke Plan (Dust/No Dust for dust units) under Condition 15.2. The Permittee may change visible-emissions plans for an emission unit at any time unless prohibited from doing so by Condition 15.3.

15.1 Method 9 Plan. For all 18-minute observations in this plan, observe exhaust, following 40 C.F.R. 60, Appendix A-4, Method 9, adopted by reference in 18 AAC 50.040(a), for 18 minutes to obtain 72 consecutive 15-second opacity observations.

- a. First Method 9 Observation. Observe exhaust for 18 minutes within six months after the issue date of this permit or within 30 days after beginning operation if the emission unit is not operated within the first six months after the issue date of the permit, or within 14 calendar days after changing from the Smoke/No-Smoke Plan (or Dust/No Dust Plan) of Condition 15.2, whichever is later.
- b. Monthly Method 9 Observations. After the first Method 9 observation, perform 18-minute observations at least once in each calendar month that a unit operates.
- c. Semiannual Method 9 Observations. After observing emissions for three consecutive operating months under Condition 15.1b, unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, observe emissions at least semiannually for 18 minutes if the emission unit is operated during that semiannual period.
Semiannual observations must be taken between four and seven months after the previous set of observations.
- d. Annual Method 9 Observations. After at least two semiannual 18-minute observations, unless a six minute average is greater than 15 percent and one or more individual observations are greater than 20 percent, observe emissions at least annually if the emission unit is operated during that annual period.
Annual observations must be taken between 10 and 13 months after the previous observations and must include at least three 18-minute sets of observations.

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- e. **Increased Method 9 Frequency.** If a six-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that emission units to at least monthly intervals, until the criteria in Condition 15.1c for semiannual monitoring are met. The start of a new calendar year does not negate this requirement.

15.2 Smoke/No Smoke Plan (or Dust/No Dust). Observe the exhaust for the presence or absence of visible emissions, excluding condensed water vapor.

- a. **Initial Monitoring Frequency.** Observe the exhaust during each calendar day that an emissions unit operates.
- b. **Reduced Monitoring Frequency.** After the emissions unit has been observed on 30 consecutive operating days, if the emissions unit operated without visible smoke or dust in the exhaust for those 30 days, then observe emissions at least once in every calendar month that an emissions unit operates.
- c. **Smoke or Dust Observed.** If smoke or dust is observed, either begin the Method 9 Plan of Condition 15.1 or perform the corrective action required under Condition 15.3.

15.3 Corrective Actions Based on Smoke/No Smoke (or Dust/No Dust) Observations.

If visible emissions are present in the exhaust during an observation performed under the Smoke/No Smoke (or Dust/No Dust) Plan of Condition 15.2, then the Permittee shall either follow the Method 9 plan of Condition 15.1 or

- a. initiate actions to eliminate smoke or dust from the emission unit within 24 hours of the observation;
- b. keep a written record of the starting date, the completion date, and a description of the actions taken to reduce smoke or dust; and
- c. after completing the actions required under Condition 15.3a;
 - (i) take observations in accordance with Condition 15.2;
 - (A) at least once per day for the next seven operating days and until the initial 30 day observation period is completed; and
 - (B) continue as described in Condition 15.2b; or
 - (ii) if the actions taken under Condition 15.3a do not eliminate the smoke or if subsequent smoke or dust is observed under the schedule of Condition 15.3c(i)(A), then observe the exhaust using the Method 9 Plan unless the Department gives written approval to resume observations under the Smoke/No Smoke (or Dust/No Dust) Plan. After observing smoke or dust and making observations under the Method 9 Plan, the Permittee may at any time take corrective action that eliminates smoke and restart the Smoke/No Smoke (or Dust/No Dust) Plan under Condition 15.2a.

16. Visible Emissions Recordkeeping. The Permittee shall keep records as follows:

16.1 If using the Method 9 Plan of Condition 15.1

- a. the observer shall record
 - (i) the name of the stationary source, emissions unit and location, stationary source type, observer's name and affiliation, and the date on the Visible Emissions Field Data Sheet in Exhibit B;
 - (ii) the time, estimated distance to the emissions location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), plume background, and operating rate (load or fuel consumption rate) on the sheet at the time opacity observations are initiated and completed;
 - (iii) the presence or absence of an attached or detached plume and the approximate distance from the emissions outlet to the point in the plume at which the observations are made;
 - (iv) opacity observations to the nearest five percent at 15-second intervals on the Visible Emissions Observation in Exhibit B, and
 - (v) the minimum number of observations required by the permit; each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period;
- b. to determine the six-minute average opacity, divide the observations recorded on the record sheet into sets of 24 consecutive observations; sets need not be consecutive in time and in no case shall two sets overlap; for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; record the average opacity on the sheet; and
- c. calculate and record the highest 18-consecutive-minute averages observed.

16.2 If using the Smoke/No Smoke (or Dust/No Dust) Plan of Condition 15.2, record the following information in a written log for each observation and submit copies of the recorded information upon request of the Department:

- a. the date and time of the observation;
- b. from **Table 1**, the ID of the unit observed;
- c. whether visible emissions are present or absent in the exhaust;
- d. a description of the background to the exhaust during the observation;
- e. if the emissions unit starts operation on the day of the observation, the startup time of the emissions unit;
- f. name and title of the person making the observation; and
- g. operating rate (load or fuel consumption rate).

17. Visible Emissions Reporting. The Permittee shall report visible emissions as follows:

- 17.1 Include in each stationary source operating report under Condition 34
- a. which visible-emissions plan of Condition 15 was used for each emissions unit; if more than one plan was used, give the time periods covered by each plan;
 - b. for each emissions unit under the Method 9 Plan,
 - (i) copies of the observation results (i.e. opacity observations) for each emissions unit that used the Method 9 Plan, except for the observations the Permittee has already supplied to the Department; and
 - (ii) a summary to include:
 - (A) number of days observations were made;
 - (B) highest six-minute average observed; and
 - (C) dates when one or more observed six-minute averages were greater than 20 percent;
 - c. for each emissions unit under the Smoke/No Smoke (or Dust/No Dust) Plan, the number of days that observations were made and which days, if any, that smoke or dust was observed; and
 - d. a summary of any monitoring or record keeping required under Conditions 15 and 16 that was not done.
- 17.2 Report under Condition 33:
- a. the results of Method 9 observations that exceed an average 20 percent for any six-minute period; and
 - b. if any monitoring under Condition 15 was not performed when required, report within three days of the date the monitoring was required.

For Diesel Fired Engines (Units 208, 209, 210, 220, and 221)

18. Particulate Matter Monitoring. The Permittee shall conduct source tests on diesel fired engines Units 208, 209, 210, 220, and 221, to determine the concentration of PM in the exhaust of a unit, as follows:

- 18.1 Within six months of exceeding the criteria of Condition 18.2a or 18.2b, either
- a. conduct a PM source test according to requirements set out in Section 6; or
 - b. make repairs so that emissions no longer exceed the criteria of Condition 18.2; to show that emissions are below those criteria, observe emissions as described in Condition 15.1 under load conditions comparable to those when the criteria were exceeded.
- 18.2 Conduct the test according to Condition 18.1 if

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- a. 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity greater than 20 percent; or
 - b. for an emission unit with an exhaust stack diameter that is less than 18 inches, 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity that is greater than 15 percent and not more than 20 percent, unless the Department has waived this requirement in writing.
- 18.3 During each one-hour PM source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the average opacity that was measured during each one-hour test run. Submit a copy of these observations with the source test report.
- 18.4 The automatic PM source test requirement in Conditions 18.1 and 18.2 is waived for an emissions unit if a PM source test on that unit has shown compliance with the PM standard during this permit term.
- 19. Particulate Matter Record Keeping.** Within 180 calendar days after the effective date of this permit, the Permittee shall record the exhaust stack diameter(s) of Emission Unit 208, 209, 210, 220, and 221. Report the stack diameter(s) in the next operating report under Condition 34.
- 20. Particulate Matter Reporting.** The Permittee shall report as follows:
- 20.1 Report under Condition 33
 - a. the results of any PM source test that exceeds the PM emissions limit; or
 - b. if one of the criteria of Condition 18.2 was exceeded and the Permittee did not comply with either Condition 18.1a or 18.1b, this must be reported by the day following the day compliance with Condition 18.1 was required.
 - 20.2 Report observations in excess of the threshold of Condition 18.2b within 30 days of the end of the month in which the observations occur.
 - 20.3 In each Operating Report required under Condition 34, include
 - a. the dates, unit ID(s), and results when an observed 18-minute average was greater than an applicable threshold in Condition 18.2;
 - b. a summary of the results of any PM testing under Condition 18; and
 - c. copies of any visible emissions observation results (opacity observations) greater than the thresholds of Condition 18.2, if they were not already submitted.
- For Baghouses (Units ALAB and ALAB4) and Scrubbers (Units 540, 541, ALAB2, and ALAB3)**
- 21. Particulate Matter Monitoring.** The Permittee shall conduct source tests to determine the concentration of PM in the exhaust of Emissions Units 540, 541, ALAB, and ALAB1 through ALAB4, as follows:

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- 21.1 Conduct a PM source test according to the requirements set out in Section 6 no later than 90 calendar days after any time corrective maintenance fails to eliminate visible emissions greater than the 20 percent opacity threshold for two or more 18-minute observations in a consecutive six-month period.
- 21.2 During each one-hour PM source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the average opacity that was measured during each one-hour test run.
- 21.3 The PM source test requirement in Condition 21.1 is waived for an emission unit if:
- a. a PM source test during the most recent semiannual reporting period on that unit shows compliance with the PM standard since permit issuance, or
 - b. if a follow-up visible emission observation conducted using Method-9 during the 90 days shows that the excess visible emissions described in Condition 15.1e no longer occur.
- 22. Particulate Matter Recordkeeping.** The Permittee shall keep records of the results of any PM testing and visible emissions observations conducted under Conditions 21.1 and 21.2, in accordance with Condition 31.
- 23. Particulate Matter Reporting.** The Permittee shall report as follows:
- 23.1 In each stationary source operating report required by Condition 34, include
- a. the dates, Emission Units, and results when an 18-minute opacity observation was greater than the applicable threshold criterion in 15.1e; and
 - b. a summary of the results of any PM testing and visible emissions observations conducted under Conditions 21.1 and 21.2.
- 23.2 Report as excess emissions, in accordance with Condition 33, any time the results of a source test for PM exceeds the PM emission limit stated in Condition 3.

Section 6. General Source Testing and Monitoring Requirements

- 24. Requested Source Tests.** In addition to any source testing explicitly required by the permit, the Permittee shall conduct source testing as requested by the Department to determine compliance with applicable permit requirements.
- 25. Test Deadline Extension.** The Permittee may request an extension to a source test deadline established by the Department. The Permittee may delay a source test beyond the original deadline only if the extension is approved in writing by the Department's appropriate division director or designee.
- 26. Test Plans.** Before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance and must specify how the source will operate during the test and how the Permittee will document that operation. The Permittee shall submit a complete plan within 60 days after receiving a request under Condition 24 and at least 30 days before the scheduled date of any test unless the Department agrees in writing to some other time period. Retesting may be done without resubmitting the plan.
- 27. Test Notification.** At least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and the time the source test will begin.
- 28. Test Reports.** Within 60 days after completing a source test, the Permittee shall submit two copies of the results in the format set out in the *Source Test Report Outline*, adopted by reference in 18 AAC 50.030. The Permittee shall certify the results in the manner set out in Condition 29. If requested in writing by the Department, the Permittee must provide preliminary results in a shorter period of time specified by the Department.

Section 7. General Recordkeeping, Reporting, and Compliance Certification Requirements

- 29. Certification.** The Permittee shall certify all reports, compliance certifications, or other documents submitted to the Department and required under the permit by including the signature of a responsible official for the permitted stationary source following the statement: “Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.” Excess emission reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal.
- 30. Submittals.** Unless otherwise directed by the Department or this permit, the Permittee shall send reports, compliance certifications, and other documents required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician. The Permittee may, upon consultation with the Compliance Technician regarding software compatibility, provide electronic copies of data reports, emission source test reports, or other records under a cover letter certified in accordance with Condition 29.
- 31. Information Requests.** The Permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the Permittee shall furnish to the Department copies of records required to be kept by the permit. The Department may require the Permittee to furnish copies of those records directly to the federal administrator.
- 32. Recordkeeping Requirements.** The Permittee shall keep all records required by this permit for at least five years after the date of collection, including:
- 32.1 copies of all reports and certifications submitted pursuant to this section of the permit; and
 - 32.2 records of all monitoring required by this permit, and information about the monitoring including:
 - a. calibration and maintenance records, original strip chart or computer-based recordings for continuous monitoring instrumentation;
 - b. sampling dates and times of sampling or measurements;
 - c. the operating Conditions that existed at the time of sampling or measurement;
 - d. the date analyses were performed;
 - e. the location where samples were taken;
 - f. the company or entity that performed the sampling and analyses;
 - g. the analytical techniques or methods used in the analyses; and
 - h. the results of the analyses.

33. Excess Emissions and Permit Deviation Reports.

- 33.1 Except as provided in Condition 40, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:
- a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commenced or is discovered, report
 - (i) emissions that present a potential threat to human health or safety; and
 - (ii) excess emissions that the Permittee believes to be unavoidable;
 - b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or non-routine repair that causes emissions in excess of a technology based emission standard;
 - c. report all other excess emissions and permit deviations
 - (i) within 30 days of the end of the month in which the emissions or deviation occurs, except as provided in Condition 33.1c(ii); and
 - (ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under Condition 33.1c(i);
 - (iii) for failure to monitor, as required in other applicable conditions of this permit.
- 33.2 The Permittee must report using either the Department’s on-line form, or if the Permittee prefers, the form contained in Exhibit C of this permit. The Permittee must provide all information called for by the form that is used.
- 33.3 If requested by the Department, the Permittee shall provide a more detailed written report as requested to follow up an excess emissions report.

34. Operating Reports. During the life of this permit, the Permittee shall submit to the Department an original and one copy of an operating report by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.

- 34.1 The operating report must include all information required to be in operating reports by other conditions of this permit.
- 34.2 If excess emissions or permit deviations that occurred during the reporting period are not reported under Condition 34.1, either
- a. the Permittee shall identify
 - (i) the date of the deviation;

- (ii) the equipment involved;
 - (iii) the permit condition affected;
 - (iv) a description of the excess emissions or permit deviation; and
 - (v) any corrective action or preventive measures taken and the date of such actions; or
- b. when excess emissions or permit deviations have already been reported under Condition 33 the Permittee may cite the date or dates of those reports.

Section 8. Fee Conditions

35. Assessable Emissions. The Permittee shall pay to the Department an annual emission fee based on the stationary source's assessable emissions as determined by the Department under 18 AAC 50.410. The assessable emission fee rate is set out in 18 AAC 50.410(b). The Department will assess fees per ton of each air contaminant that the stationary source emits or has the potential to emit in quantities greater than 10 tpy. The quantity for which fees will be assessed is the lesser of

35.1 The stationary source's assessable potential to emit of 386 tpy.

35.2 The stationary source's projected annual rate of emissions that will occur from July 1 to the following June 30, based upon actual annual emissions emitted during the most recent calendar year or another 12 month period approved in writing by the Department, when demonstrated by

- a. an enforceable test method described in 18 AAC 50.220;
- b. material balance calculations;
- c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or
- d. other methods and calculations approved by the Department.

36. Assessable Emission Estimates. Emission fees will be assessed as follows:

36.1 No later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, 610 University Avenue, Fairbanks, AK 99709-3643, the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates; or

36.2 If no estimate is received on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set forth in Condition 35.1.

Section 9. Generally Applicable Requirements

- 37. Good Air Pollution Control Practice.** The Permittee shall do the following for all Emission Units listed in **Table 1**, except for Emission Units 102, 414, 415, 533, and 534A through 534E:
- 37.1 Perform regular maintenance considering the manufacturer’s or the operator’s maintenance procedures.
 - 37.2 Keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format.
 - 37.3 Keep a copy of either the manufacturer’s or the operator’s maintenance procedures.
- 38. Reasonable Precautions to Prevent Fugitive Dust.** A person who causes or permits bulk materials to be handled, transported, or stored, or who engages in an industrial activity or construction project shall take reasonable precautions to prevent particulate matter from being emitted into the ambient air.
- 38.1 Keep records of
 - a. complaints received by the Permittee and complaints received by the Department and conveyed to the Permittee; and
 - b. any additional precautions that are taken
 - (i) to address complaints described in Condition 38.1 or to address the results of Department inspections that found potential problems; and
 - (ii) to prevent future dust problems.
 - 38.2 Report according to Condition 40.
- 39. Fugitive Dust Requirements.** In addition to the general requirements for controlling fugitive dust listed in Condition 38, the Permittee shall comply with the following requirements specific to the Pogo Mine Project.
- 39.1 Perform a daily inspection of all unpaved roads (Emission Units 535 through 539), temporary ore stockpiles and rock storage areas, drystack tailings facility, and gravel pits for fugitive dust. If dust is present, and the road or stockpile is unfrozen, apply water or suitable dust suppression chemicals on roads and stockpiles, or cover the stockpiles. Maintain a log of daily inspection and actions to keep dust down. Keep the records for five years.
 - 39.2 For the baghouses on Emission Units 528, 532 through 534, ALAB and ALAB4:
 - a. Monitor the pressure drop across each baghouse daily to ensure that it is within the limits recommended by the manufacturer.

-
- b. Inspect each baghouse prior to initial startup, whenever the pressure drop across the baghouse is not within the limits recommended by the manufacturer, and every 180 days of operation. Replace worn or damaged bags prior to restarting the baghouse or within 72 hours of discovery, whichever occurs later.
 - c. Maintain maintenance logs detailing pressure drop across baghouse, baghouse inspections, and bag replacements. Keep records for five years.
- 39.3 For the scrubbers on Emission Units 540, 541, ALAB2 and ALAB3:
- a. Operate the scrubbers with the recommended operational parameters per manufacturers recommendations
 - b. Maintain logs detailing operational parameters, scrubber inspections and scrubber part replacements. Keep records for five years.
- 39.4 During operation, use water control techniques to control dust when dust is observed under Condition 15.2 on Emission Units 302 (explosives) and CP (portable crusher), and 517 through 525 (underground material transfer units).
- 40. Air Pollution Prohibited.** No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.
- 40.1 If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 33.
- 40.2 As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 40.
- 40.3 The Permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if
- a. after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 40; or
 - b. the Department notifies the Permittee that it has found a violation of Condition 40.
- 40.4 The Permittee shall keep records of
- a. the date, time, and nature of all emissions complaints received;
 - b. the name of the person or persons that complained, if known;
 - c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 40; and

-
- d. any corrective actions taken or planned for complaints attributable to emissions from the stationary source.
- 40.5 With each stationary source operating report under Condition 34, the Permittee shall include a brief summary report which must include
- a. the number of complaints received;
 - b. the number of times the Permittee or the Department found corrective action necessary;
 - c. the number of times action was taken on a complaint within 24 hours; and
 - d. the status of corrective actions the Permittee or Department found necessary that were not taken within 24 hours.
- 40.6 The Permittee shall notify the Department of a complaint that is attributable to emissions from the stationary source within 24 hours after receiving the complaint, unless the Permittee has initiated corrective action within 24 hours of receiving the complaint.
- 41.** The Permittee shall allow the Department or an inspector authorized by the Department, upon presentation of credentials and at reasonable times with the consent of the owner or operator to
- 41.1 enter upon the premises where an emission unit subject to the permit is located or where records required by the permit are kept;
 - 41.2 have access to and copy any records required by the permit;
 - 41.3 inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and
 - 41.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

Section 10. Terms to Make Permit Enforceable

- 42.** The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for
- 42.1 an enforcement action; or
 - 42.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280.
- 43.** It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.
- 44.** Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit.
- 45.** The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- 46.** The permit does not convey any property rights of any sort, nor any exclusive privilege.

Section 11. Permit Documentation

August 5, 2010 Meeting between the Department, SLR-Hoefler, and Sumitomo.

July 27, 2010: email: Clarification on emission unit naming and Unit CG.

July 20, 2010 email: Clarification on removed units from emission unit inventory.

July 10, 2010 Application to revise AQ0406MSS04 received complete.

Section 12. Visible Emissions Forms

Visible Emissions Field Data Sheet

Certified Observer: _____

Company &
 Stationary
 Source: _____

Location: _____

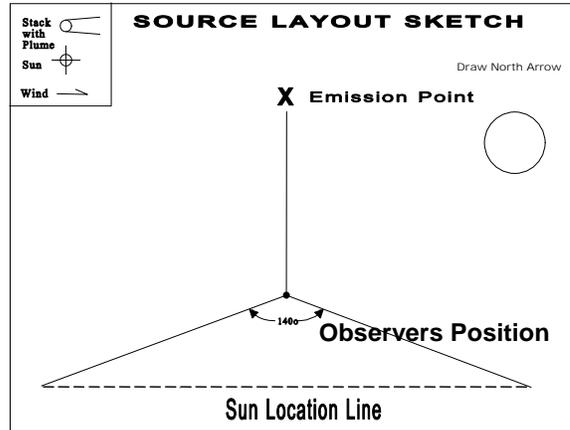
Test No.: _____ Date: _____

Emission Unit: _____

Production Rate/Operating
 Rate: _____

Unit Operating Hours: _____

Hrs. of observation: _____



Clock Time	Initial				Final
Observer location					
Distance to discharge					
Direction from discharge					
Height of observer point					
Background description					
Weather conditions					
Wind Direction					
Wind speed					
Ambient Temperature					
Relative humidity					
Sky conditions: (clear, overcast, % clouds, etc.)					
Plume description:					
Color					
Distance visible					
Water droplet plume? (Attached or detached?)					
Other information					

Section 13. ADEC Notification Form¹

Stationary Source (Facility) Name _____

Air Quality Permit Number _____

Company Name _____

When did you discover the Excess Emissions/Permit Deviation?

Date: _____ / _____ / _____ Time: _____ : _____

When did the event/deviation occur?

Begin Date: _____ / _____ / _____ Time: _____ : _____ (please use 24hr clock)
End Date: _____ / _____ / _____ Time: _____ : _____ (please use 24hr clock)

What was the duration of the event/deviation?: _____ : _____ (hrs:min) or _____ days
(total # of hrs, min, or days, if intermittent then include only the duration of the actual emissions/deviation)

Reason for Notification: (please check only 1 box and go to the corresponding section)

- Excess Emissions - Complete Section 1 and Certify.
- Deviation from Permit Condition - Complete Section 2 and Certify
- Deviations from COBC, CO, or Settlement Agreement - Complete Section 2 and Certify

Section 1. Excess Emissions

(a) Was the exceedance:

(b) Cause of Event (Check one) Intermittent Continuous

- Start Up /Shut Down Natural Cause (weather/earthquake/flood)
- Control Equipment Failure Scheduled Maintenance/Equipment Adjustment
- Bad fuel/coal/gas Upset Condition Other _____

(c) **Description**

Describe briefly, what happened and the cause. Include the parameters/operating conditions exceeded, limits, monitoring data and exceedance.

(d) Emissions Units Involved:

Identify the emission unit involved in the event, using the same identification number and name as in the permit. Identify each emission standard potentially exceeded during the event and the exceedance.

Unit ID	Emission Unit Name	Permit Condition Exceeded/Limit/Potential Exceedance

(e) Type of Incident (Please Check only one).

- Opacity _____ % Venting _____ (gas/scf) Control Equipment Down
- Fugitive Emissions Emission Limit Exceeded Other:

¹ Revised as of August 20, 2008.

Marine Vessel Opacity Flaring

(f) Unavoidable Emissions:

Do you intend to assert that these excess emissions were unavoidable? Yes No

Do you intend to assert the affirmative defense of 18 AAC 50.235? Yes No

Certify Report (go to end of form)

Section 2 Permit Deviations

(a) Permit Deviation Type (check one only box, corresponding with the section in the permit).

Source Specific

Failure to monitor/report

General Source Test/Monitoring Requirements

Recordkeeping/Reporting/Compliance Certification

Standard Conditions Not Included in Permit

Generally Applicable Requirements

Reporting/Monitoring for Diesel Engines

Record Keeping Failure

Insignificant Source

Facility Wide

Other Section _____ (title of section and section number of your permit).

(b) Emission Unit Involved.

Identify the emission unit involved in the event, using the same identification number and name as in the permit. List the corresponding permit conditions and the deviation.

Unit ID	Emission Unit Name	Permit Condition / Potential Deviation

(c) Description of Potential Deviation:

Describe briefly what happened and the cause. Include the parameters/operating conditions and the potential deviation.

(d) Corrective Actions:

Describe actions taken to correct the deviation or potential deviation and to prevent future recurrence.

Certification:

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name: _____ Title: _____ Date: _____
Signature: _____ Phone Number: _____

NOTE: *This document must be certified in accordance with 18 AAC 50.345(j)*

To Submit this Report:

1. Fax to: 907-451-2187;

Or

2. Email to: DEC.AQ.Airreports@alaska.gov - *if faxed or emailed, the report must be certified within the Operating Report required for the same reporting period per Condition 34.*

Or

3. Mail to: ADEC
Air Permits Program
610 University Avenue
Fairbanks, AK 99709-3643

Or

4. Phone Notification: 907-451-5173
Phone notifications require a written follow-up report.

Or

5. Submission of information contained in this report can be made electronically at the following website:

<https://myalaska.state.ak.us/deca/air/airtoolsweb/>

if submitted online, report must be submitted by an authorized E-Signer for the Stationary Source.