# STERN KERN

## **ROUGH DRAFT**

## MAJOR SOURCE PERMIT TO OPERATE

2700 "M" Street, Suite 302 Bakersfield, CA 93301-2370 Bakersfield: (661) 862-5250

**Permittee:** Golden Queen Mining Co. LLC

**Location:** 2818 Silver Queen Rd.

Mojave, California 93501

**Permit No:** 1223-V-2017

**Issuance Date:** XXXX XX, 2025

**Expiration Date:** XXXX XX, 2030

Nature of Business: Mining, Extraction, and Refining of Gold and Silver Ore

This permit is issued pursuant to and is conditioned upon compliance with provisions of the Eastern Kern Air Pollution Control District Rules and Regulations as authorized by the California Health and Safety Code, Section 39002. This permit is subject to accuracy of all information submitted relating to the permit application and to conditions appended hereto. It is valid from date of issuance until date of expiration unless renewed and shall be made readily available for inspection at any reasonable time to any and all persons who may request to see it.

Pursuant to the Clean Air Act Amendments of 1990 (CAAA), all conditions of this permit are federally enforceable by U.S. EPA and Eastern Kern Air Pollution Control District (District). Those provisions which are not required by the CAAA are considered to be Eastern Kern provisions and are not federally enforceable by U.S. EPA.

By:

Gary Ray Jr., Air Pollution Control Officer

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### **General Permit Conditions**

In accordance with California Health and Safety Code, Sections 39002 and 42301.10 through 42301.12 and all applicable Eastern Kern Air Pollution Control District (District) Rules and Regulations, the conditions which are listed below are hereby contained in and made a part of this permit:

	Federally Enforceable Conditions	Reg/Rule
1.	Upon the request of and as directed by the Control Officer, the owner shall provide, install, and operate continuous monitoring equipment on such operations as directed. The owner shall maintain, calibrate, and repair the equipment and shall keep the equipment operating at design capabilities.	Reg. I, Rule 108
2.	Upon the request of the Control Officer and as directed by him the owner of any source operation which emits or may emit air contaminants, for which emission limits have been established, shall provide the necessary and proper facilities for source sampling.  The applicable test method, if not specified in the rule, shall be conducted in accordance with Title 40 CFR, Subpart 60, Appendix A - Reference Methods, except particulate matter (PM <sub>10</sub> ) for compliance with Rule 210.1 requirements shall be conducted in accordance with Title 40 CFR, Subpart 51, Appendix M, Method 201 or 201A. Where no test method exists in the preceding references for a source type source sampling shall be conducted in accordance with California Air Resources Board (CARB) approved methods.	Reg. I, Rule 108.1
3.	Severability  If any provision, clause, sentence, paragraph, section or part of these Regulations or application thereof to any person or circumstance shall for any reason be adjudged by a court of competent jurisdiction to be unconstitutional or invalid, such judgement shall not affect or invalidate the remainder of this Regulation and the application of such provision to other persons or circumstances, but shall be confined in its operation to the provision, clause, sentence, paragraph, section or part thereof directly involved in the controversy in which such judgement shall have been rendered and to the person or circumstance involved, and it is hereby declared to be the intent of the Eastern Kern Air Pollution Control Board that these Regulations would have been adopted in any case had such invalid provision or provisions not been included.	Reg. I, Rule 114

	Federally Enforceable Conditions	Reg/Rule
4.	Applicability of Federally Enforceable Conditions  Federally Enforceable Conditions do not apply to the following permit sections: Equipment Descriptions, and any Design Conditions, Operational Conditions, Special Conditions, or Compliance Testing Requirements designated as District only. Federally Enforceable Conditions shall apply to Design Conditions, Operational Conditions, Special Conditions, Compliance Testing Requirements, and Emission Limits except as noted above.	Reg. II, Rule 201.1
5.	Right of Entry  The source shall allow entry of District, CARB, or U.S. EPA officials for purpose of inspection and sampling, including:  A. Inspection of the stationary source, including equipment, work practices, operations, and emission-related activity;  B. Inspection and duplication of records required by the permit to operate; and C. Source sampling or other monitoring activities.	Reg. II, Rule 201.1
6.	Administrative Permit Amendment and Minor Permit Modification  Administrative Permit Amendment and Minor Permit Modification are those actions taken by the District as defined in Rule 201.1.	Reg. II, Rule 201.1
7.	<ul> <li>Compliance with Permit Conditions</li> <li>A. Golden Queen shall comply with all permit conditions;</li> <li>B. Permit does not convey any property rights or any exclusive privilege;</li> <li>C. Non-compliance with any permit condition shall be grounds for permit termination, revocation and reissuance, modification, enforcement action or denial of permit renewal;</li> <li>D. Permittee shall not use "need to halt or reduce a permitted activity in order to maintain compliance" as a defense for non-compliance with any permit condition;</li> </ul>	Reg. II, Rule 201.1
	<ul> <li>E. Pending permit action or notification of anticipated non-compliance does not stay any permit condition; and</li> <li>F. Within a reasonable time period, permittee shall furnish any information requested by the APCO, in writing, for purpose of determining: 1) compliance with the permit, or 2) whether or not cause exists for a permit or enforcement action.</li> </ul>	

	Federally Enforceable Conditions	Reg/Rule
8.	Record keeping	Reg. II, Rule 201.1
	A. Recording of maintenance of all monitoring and support information associated with all permit streamlining requirements imposed in accordance with Subsection V.J., all District-only rules which apply in accordance with Subsection V.K.1., and all applicable federal requirement not submitted by such permit streamlining requirement(s) or District-only rules, including:	
	<ol> <li>Date, place, and time of sampling;</li> <li>Operating conditions at time of sampling;</li> <li>Date, place, and method of analysis; and</li> <li>Results of analysis;</li> </ol>	
	B. Retention of records of all required monitoring data and support information for a period of at least five years from the date of sample collection, measurement, report, or application; and	
	C. Any other record keeping deemed necessary by the APCO to ensure compliance with all permit streamlining requirements imposed in accordance with Subsection V.J., all District-only rules which apply in accordance with Subsection V.K.1., and all applicable federal requirements not subsumed by such permit streamlining requirement(s) or District-only rules.	

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	Federally Enforceable Conditions	Reg/Rule
9.	Pursuant to Rule 201.1.VI.c. District hereby references the following documents which are clearly identified and available to the District and to the public:  A. Each Authority to Construct file for new equipment and each Authority to Construct file to modify existing equipment.  These files contain title, document number, applicant, and date received. Also included in these files are rule citations, engineering evaluations, and final documents all related to the existing permit conditions and emissions limits set forth in this permit.	Reg. II, Rule 201.1
10.	<ul> <li>A. Any non-conformance with permit requirements, including any attributable to emergency conditions (as defined in the permit) shall be promptly reported to the APCO;</li> <li>B. Monitoring report shall be submitted at least every six months identifying any non-conformance with permit requirements, including any previously reported to the APCO;</li> <li>C. All reports of non-conformance with permit requirements shall include probable cause of non-conformance and any preventative or corrective action taken;</li> <li>D. Progress report shall be made on a compliance schedule at least semi-annually and including: <ol> <li>Date when compliance will be achieved,</li> <li>Explanation of why compliance was not, or will not be achieved by the scheduled date, and</li> <li>Log of any preventative or corrective action taken; and</li> </ol> </li> <li>E. Each monitoring report shall be accompanied by a written statement from the responsible official certifying the truth, accuracy, and completeness of the report.</li> <li>F. Facility is subject to Greenhouse Gas (GHG) reporting requirements if actual or potential GHG emissions are greater than 100 tpy GHGs as of January 2, 2011.</li> </ul>	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
11.	Permit Life	Reg. II, Rule 201.1
	The life of this permit shall be five years from the date of issuance.	
12.	Periodic Monitoring	
	Non-Point Golden Queen shall conduct testing semi-annually, in accordance with the methodology contained in EPA Method 22 for all non-point sources. This testing will be the basis for determining compliance with the visible emission standard in District Rule 401.	
	If no emissions are observed utilizing Method 22, the non-point source shall be deemed to be in compliance with the visible emission standard. If emissions are observed from any non-point source, Golden Queen shall conduct testing on that non-point source within 24 hours of the Method 22 testing in accordance with EPA Method 9 to verify compliance with the visible emission standard.	
	NOTE: This requirement does not apply to fugitive emissions resulting from activities not covered by a permit to operate unless the source is subject to District Rule 210.1 (NSR) requirements.	
	Golden Queen shall conduct ambient monitoring of PM10 in accordance with the requirements of a District approved Monitoring Protocol, as well as ambient monitoring of hydrogen cyanide (HCN) from Heap Leach Pads during operations, and during detoxification and closure, in accordance with the requirements of a District approved Monitoring Protocol.	
	Point Golden Queen shall conduct testing semi-annually, in accordance with the methodology contained in EPA Method 22 for all point sources. This testing will be the basis for determining compliance with the visible emission standard in District Rule 401. If no emissions are observed utilizing Method 22, the point source shall be deemed to be in compliance with the visible emission standard. If emissions are observed from any point source, Golden Queen shall conduct testing on that point source:	
	A. Within 24 hours of the Method 22 testing in accordance with EPA Method 9 to verify compliance with the visible emission standard. If compliance is not documented:	
	B. Within 30 days of the Method 9 testing in accordance with EPA Method 5 or 5D to verify compliance with the requirements of District Rules 404.1, 405, and/or 210.1.	

	Federally Enforceable Conditions	Reg/Rule
13.	Additional Monitoring	
	Diesel standby and emergency piston engines do not require opacity monitoring if utilizing California diesel or other low-sulfur, low aromatic fuel. Fuel records shall be kept for verification purposes and an operational log for hours of operation.	
	All control equipment shall be inspected annually for proper operation. Golden Queen shall maintain all records of control equipment maintenance for a period of five years.	
	Monitoring shall be the responsibility of the source; however, a visible emissions inspection or Method 9 conducted by a District inspector may be counted as meeting the requirement for the source to conduct same if the information and records generated by the inspector meets the requirements of the permit and a copy of the records are maintained by the source for a period of five years.	
	Record keeping provisions associated with all monitoring requirements shall include the following information:	
	A. Identification of stack or emission point being monitored;	
	B. Operational conditions at the time of monitoring;	
	C. Records of any monitoring conducted, including records of emission or operational parameter values and the date, place and time of sampling or measurement; and	
	D. Where corrective action is triggered, description of the corrective action and the date, time and results of any corrective action.	
	Testing Golden Queen shall conduct stack testing annually and at other times as specified by U.S. EPA or the District, in accordance with the methodology outlined in EPA Methods 201A, 8, 7E, 10, 18, 201A or equivalent, to verify compliance with emission limits and the accuracy of any continuous in-stack monitors. The District and U.S. EPA shall be notified at least 30 days in advance of the testing to allow an observer to be present and the report of results shall be transmitted to the District as soon as they are available. (District Rule 210.1)	

	Federally Enforceable Conditions	Reg/Rule
14.	Monitoring, Testing, Record keeping Requirements (Applies to EU 010.) (Gasoline Storage - Phase I)	Reg. II, Rule 201.1
	A. Compliance with the vapor recovery requirements of District Rule 412 shall be demonstrated using California Air Resources Board (CARB) Method 201.1 or 201.1a upon installation and as directed by the Air Pollution Control Officer;	Reg. IV, Rule 412
	B. True vapor pressure shall be determined using Reid vapor pressure ASTM Method No. D-323-82 at storage temperature; and	
	C. The test method to determine vapor tightness of delivery vessels shall be EPA Method 27.	
15.	Monitoring, Testing, Record keeping Requirements (Applies to EU 010.) (Gasoline Storage & Dispensing - Phase II)	Reg. II, Rule 201.1
	Verification that each CARB-certified Phase II Vapor Recovery System meets or exceeds the requirements of tests specified in District Rule 412.1, Subsection V.C. shall be maintained. These test results shall be dated and shall contain the names, addresses, and telephone numbers of person(s) responsible for system installation and testing.	Reg. IV, Rule 412.1
	Facility shall be pressure tested to determine proper installation and function before startup, and thereafter as directed by the Control Officer if not consistently operated leak-free or a major modification is implemented.	
	Tests shall be conducted in accordance with test procedures found in CARB's "Test Procedures for Determination of the Efficiency of Gasoline Vapor Recovery Systems at Service Stations".	
16.	Conditional Approval	Reg. II, Rule 209
	The Control Officer shall issue an Authority to Construct or a Permit to Operate, subject to conditions to insure compliance of the operation of any article, machine, equipment or other contrivance within the standards of Rule 208 and 208.1, in which case the conditions shall be specified in writing. Commencing work under such Authority to Construct or operation under such Permit to Operate shall be deemed acceptance of all conditions so specified. The Control Officer shall issue an Authority to Construct or Permit to Operate with revised conditions upon receipt of a new application, if the applicant demonstrates the article, machine, equipment or other contrivance can be operated within the standards of Rule 208 and 208.1 under the revised conditions.	

	Federally Enforceable Conditions	Reg/Rule
17.		Reg. II, Rule 210.1
	$\mathcal{E}$	Section IV. D.3
	1) The Permittee has obtained all permits and approvals required by District Rules 201 and 210.1 (unless the change is exempt under District Rule 202);	
	2) The change is not subject to any requirements under Title IV of the Clean Air Act;	
	<ul> <li>The change is not a Title I modification; and</li> <li>The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of this permit.</li> </ul>	
	B. For a change that qualified under this section, the Permittee shall provide contemporaneous written notice to the District and the U.S. EPA (except for a change that is exempt under District Rule 202). This written notice shall describe the change, including the date it was made, and shall contain other information as required to determine new applicable requirements of the Clean Air Act that apply as a result of the change;	
	C. Upon satisfying the requirements of paragraph B above, the Permittee may make the proposed change;	
	D. Changes that qualify under this section are not subject to the requirements for Part 70 revisions;	
	E. The Permittee shall include each off-permit change made under this section in the application for renewal of this Part 70 permit; and	
	F. The permit shield(s) provided in this permit do not apply to off-permit changes made under this section.	
18.		Reg. II,
	Facility may be subject to District Rule 210.4, Prevention of Significant Deterioration (PSD) if it undergoes major modification(s).	Rule 210.4

	Federally Enforceable Conditions	Reg/Rule
19.	Every applicant for an Authority to Construct or a Permit to Operate shall pay a filing fee. For issuance of an Authority to Construct, or an initial Permit to Operate, the applicant shall pay fees as prescribed in Rule 301. For issuance of an Authority to Construct, application processing fees shall also be paid as prescribed in Rule 303. The applicant shall receive credit for filing fees paid.  Annually on the anniversary of issuance of a Permit to Operate, the permittee shall pay a renewal fee as prescribed in Rule 301. Fees collected pursuant to Rule 201.1, Section. VII.A. shall supplement applicable Rules 301 and 301.3 fee requirements.	Reg. III, Rule 301
	Payment of Supplemental Fee  An owner or operator, or his designee, shall pay an annual supplemental fee for a permit to operate pursuant to this Rule as determined by the calculation method in Subsection C., to provide a District-wide fee rate of \$25 per ton of fee-based emissions (CPI-adjusted) for all facilities subject to Rule 201.1, unless Rule 201.1 VII.B. applies.	Rule 201.1 Section VII. A.
20.	Greenhouse Gas Fee  Any stationary source that has actual GHG emissions, in the prior calendar year, greater than or equal to 100,000 tons of CO2e, as calculated in accordance with 40 CFR Part 98, shall pay a Consumer Price Index (CPI) adjusted GHG fee per ton of CO2e being emitted. Sources subject to this Rule shall submit an annual report of GHG emissions to the District no later than the thirty-first day of March.	Reg. III, Rule 301.4
21.	<ul> <li>Visible Emissions</li> <li>Limits A person shall not discharge into the atmosphere, from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than three minutes in any one hour which is: A. As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or B. Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in Subsection A. </li> </ul>	Reg. IV, Rule 401

Federally Enforceable Conditions	Reg/Rule
Particulate Matter Concentration - Desert Basin	Reg. IV, Rule 404.1
A. A person shall not discharge into the atmosphere from any single source operation, in service on the date this Rule is adopted, particulate matter in excess of 0.1 grains per cubic foot of gas at standard conditions.	
B. A person shall not discharge into the atmosphere from any single source operation, the construction or modification of which commenced after the adoption of this Rule, particulate matter in excess of 0.1 grains per cubic foot of gas at standard conditions.	
Particulate Matter - Emission Rate	Reg. IV, Rule 405
A person shall not discharge into the atmosphere from any source operation, particulate matter in excess of the limits set forth in the allowable particle emissions based on process weight rate table included in Rule 405.	
Sulfur Compounds	Reg. IV, Rule 407
A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 percent by volume calculated as sulfur dioxide (SO <sub>2</sub> ).	
Gasoline Transfer into Stationary Storage Containers, Delivery Vessels and Bulk Plants	Reg. IV, Rule 412
A person shall not transfer gasoline into storage or delivery vessels unless provisions are made to recover 95% of the displaced vapors.	
Transfer of Gasoline into Vehicle Fuel Tanks	Reg. IV, Rule 412.1
No person shall transfer gasoline into vehicle fuel tanks unless CARB-Certified Phase II dispensing equipment is utilized and maintained in correct working order.	Kuie 412.1
	<ul> <li>Particulate Matter Concentration - Desert Basin</li> <li>A. A person shall not discharge into the atmosphere from any single source operation, in service on the date this Rule is adopted, particulate matter in excess of 0.1 grains per cubic foot of gas at standard conditions.</li> <li>B. A person shall not discharge into the atmosphere from any single source operation, the construction or modification of which commenced after the adoption of this Rule, particulate matter in excess of 0.1 grains per cubic foot of gas at standard conditions.</li> <li>Particulate Matter - Emission Rate</li> <li>A person shall not discharge into the atmosphere from any source operation, particulate matter in excess of the limits set forth in the allowable particle emissions based on process weight rate table included in Rule 405.</li> <li>Sulfur Compounds</li> <li>A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 percent by volume calculated as sulfur dioxide (SO<sub>2</sub>).</li> <li>Gasoline Transfer into Stationary Storage Containers, Delivery Vessels and Bulk Plants</li> <li>A person shall not transfer gasoline into storage or delivery vessels unless provisions are made to recover 95% of the displaced vapors.</li> <li>Transfer of Gasoline into Vehicle Fuel Tanks</li> <li>No person shall transfer gasoline into vehicle fuel tanks unless CARB-Certified</li> </ul>

	Federally Enforceable Conditions	Reg/Rule
27.	Federal New Source Performance Standards (NSPS)  Provisions of Part 60, Chapter 1, Title 40, Code of Federal Regulations, in effect July 7, 2016, are hereby adopted by reference and made a part hereof. All new and modified sources shall comply with standards, criteria and requirements therein.	Reg. IV, Rule 422
	All applicable requirements of 40 CFR Part 60, Subparts A (General Provisions), LL, and IIII apply to this facility.	
	For the purposes of 40 CFR Part 60, Subpart LL, "Metallic Mineral Processing Plants" You are subject to this subpart if you own or operate a crusher and screen in open-pit mines; each crusher, screen, bucket elevator, conveyor belt transfer point, thermal dryer, product packaging station, storage bin, enclosed storage area, truck loading station, truck unloading station, railcar loading station, and railcar unloading station at the mill or concentrator at a facility that commences construction or modification after August 24, 1982.	
	For the purposes of 40 CFR Part 60, Subpart IIII, "Stationary Compression Ignition Internal Combustion Engines" You are subject to this subpart if you commence construction after July 11, 2005 and own or operate any stationary CI ICE that meet the following criteria, except if they are being tested at a stationary test cell/stand:	
	<ol> <li>Manufactured after April 1, 2006, and are not fire pump engines, or</li> <li>Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.</li> <li>Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or</li> </ol>	
20	reconstructs any stationary CI ICE after July 11, 2005.	D. W
28.	National Emission Standards for Hazardous Air Pollutants and Source Categories (NESHAPS)	Reg. IV, Rule 423
	Provisions of Title 40, Chapter 1, Parts 61 and 63, Code of Federal Regulations, in effect February 27, 2014, are hereby adopted by reference and made a part hereof. All sources of hazardous air pollution shall comply with applicable standards, criteria and requirements set forth herein.	
	All applicable requirements of 40 CFR Part 61, Subpart M and 40 CFR Part 63, Subparts A (General Provisions), ZZZZ, and EEEEEEE apply to this facility.	
	For the purposes of 40 CFR Part 61, Subpart M, "Asbestos", You are subject to this subpart if you own or operate a demolition or renovation activity and prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable ACM.	

	Federally Enforceable Conditions	Reg/Rule			
	For the purposes of 40 CFR Part 63, Subpart ZZZZ, "Stationary Reciprocating Internal Combustion Engines", You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.				
	For the purposes of 40 CFR Part 63, Subpart EEEEEEE, "Gold Mine Ore Processing and Production Area Source Category", You are subject to this subpart if you own or operate a gold mine ore processing and production facility as defined in §63.11651 that is an area source.				
29.	Compliance Certification	40 CFR			
	The owner/operator shall comply with the following procedures for compliance certification:	70.5d			
	A. Submittal of a compliance certification by the owner or operator to the U.S. EPA and copy to the APCO within 60 days after end of compliance certification period;				
	B. Compliance certification period shall begin July 1 of each year and end June 30 of the following year;				
	C. Such compliance certification shall identify the basis for each permit term or condition, e.g., specify the emissions limitation, standard or work practice, and a means of monitoring compliance with the term or condition;				
	D. Such compliance certification shall include compliance status and method(s) used to determine compliance for the current time period and over entire reporting period; and				
	E. Such compliance certification shall include any additional inspection, monitoring or entry requirement promulgated pursuant to Sections 114(a) and 504(b) of the CAA.				
	Any application form, report, or compliance certification submitted pursuant to these regulations shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this part shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.				
	U.S. EPA's Mailing Address:  Director, Enforcement and Compliance Assurance Division (Attn: ENF-2-1) U.S. Environmental Protection Agency 75 Hawthorne Street San Francisco, CA 94105				
	Or by email to aeo r9@epa.gov or CDX				

	Federally Enforceable Conditions	Reg/Rule
30.	Protection of Stratospheric Ozone	40 CFR 82
	Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR §82.156. Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR §82.158. Persons performing maintenance, service, repair or disposal of appliances must be certified by a certified technician pursuant to 40 CFR §82.161.	

	District Only Conditions	
1.	Inspections  Inspections shall be made by the enforcement agency for the purpose of obtaining information necessary to determine whether air pollution sources are in compliance with applicable rules and regulations, including authority to require record keeping and to make inspections and conduct tests of air pollution sources.	Reg. I, Rule 107
2.	Nuisance  A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.	Reg. IV, Rule 419

## <u>List of Insignificant Air Pollutant Emitting Equipment (TBD)</u>

Space Heating Equipment

Welding Equipment

Portable IC Engines – California Registered

Small IC Engines <50 bhp

Air Conditioning Equipment

**Atomic Absorption** 

**Inductively Coupled Plasma** 

Motor Vehicles as Defined in the CH&SC

Aboveground Waste Oil Storage Tanks

Aboveground Diesel Storage Tanks

**Small Degreasing Operations** 

<b>Facility</b>	<b>Emissions</b>	
<u>Number</u>	<u>Unit</u>	<b>Description of Source</b>
1223	001	<b>Blast Hole Drilling Operation</b>

#### **Emission Unit Equipment Description/Permit Conditions**

#### **Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Blast Hole Drilling Operation, including following equipment:

Atlas-Copco DM-45 Self- Propelled, Blast Hole Drilling Rig (Drilling Rig No. 2), powered by a 755-bhp Mercedes-Benz, Model OM 473 LA, Tier 4 EPA certified diesel piston engine (permit exempt mobile engine).

#### **OPERATIONAL CONDITIONS:**

- 1. Blast hole drill rig shall be equipped with dust skirt and water injection to minimize drilling dust emission. (Rule 210.1 BACT Requirement)
- 2. Operation of Drilling Rig No. 2 shall not exceed 7000 hours per year without District approval. (Rule 210.1)
- 3. Drilling unit shall not exceed 80 holes/day without prior District approval. (Rule 210.1)
- 4. Drilling shall not take place unless dust control equipment is operational and utilized. (Rule 210.1)
- 5. Visible Emissions from hole in the process of being drilled shall not exceed 20% opacity or Ringelmann No. 1 for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement).
- 6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1)
- 7. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
- 8. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request or District personnel. Record shall include, at minimum, days and hours of operation
- 9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH & SC 41700)

#### STATE OF CALIFORNIA AIR TOXICS HOT SPOT REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

#### **COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

#### **EMISSION LIMITS**:

Maximum emissions rate of each air contaminant from this emission unit shall not exceed following limits:

#### Particulate Matter (PM10 & PM2.5):

**(Filterable + Condensable):** 0.22 lb/hr **Hole Drilling Emissions:** 5.30 lb/day

0.77 ton/year (12-month rolling avg.)

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rule 210.1)

<b>Facility</b>	<b>Emissions</b>	
<u>Number</u>	<u>Unit</u>	<u>Description of Source</u>
1223	002	<b>Blast Hole Drilling Operation</b>

#### **Emission Unit Equipment Description/Permit Conditions**

#### **Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Blast Hole Drilling Operation, including following equipment:

Atlas-Copco DM-45 Self-Propelled, Blast Hole Drilling Rig (Drilling Rig No. 3), powered by Cummins, Model QSX-15, 450-bhp, Tier 3 EPA certified diesel piston engine (permit exempt mobile engine).

#### **OPERATIONAL CONDITIONS:**

- 1. Blast hole drill rig shall be equipped with dust skirt and water injection to minimize drilling dust emission. (Rule 210.1 BACT Requirement)
- 2. Operation of Drilling Rig No. 3 shall not exceed 7000 hours per year without District approval. (Rule 210.1)
- 3. Drilling unit shall not exceed 80 holes/day without prior District approval. (Rule 210.1)
- 4. Drilling shall not take place unless dust control equipment is operational and utilized. (Rule 210.1)
- 5. Visible Emissions from hole in the process of being drilled shall not exceed 20% opacity or Ringelmann No. 1 for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement).
- 6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1)
- 7. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
- 8. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request or District personnel. Record shall include, at minimum, days and hours of operation.
- 9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH & SC 41700)

#### STATE OF CALIFORNIA AIR TOXICS HOT SPOT REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

#### **COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

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Emission Unit 002 Permit Conditions

#### **EMISSION LIMITS**:

Maximum emissions rate of each air contaminant from this emission unit shall not exceed following limits:

#### Particulate Matter (PM10 & PM2.5):

(Filterable + Condensable): 0.22 lb/hr 5.30 lb/day

0.77 ton/year (12-month rolling avg.)

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rule 210.1)

<b>Facility</b>	<b>Emissions</b>	
Number	<u>Unit</u>	<b>Description of Source</b>
1223	004	Ore Processing Operation

#### **Emission Unit Equipment Description/Permit Conditions**

#### **Federally Enforceable Conditions**

#### **EQUIPMENT DESCRIPTION:** Ore Processing Operation, including following equipment:

- 1. Vibrating Grizzly Feeder with 100-hp electric motor and equipped with water spray nozzles;
- 2. Jaw Crusher with water sprays, dust seal, and driven by 300-hp electric motor;
- 3. Jaw crusher lube pump (1-hp);

#### **Primary:**

- 4. Jaw Crusher hydraulic toggle 7.5 hp;
- 5. Rock Breaker Primary Crusher with 60-hp electric motor;
- 6. Rock Breaker cooling fan 0.5 hp;
- 7. Self-cleaning magnet with 5-hp electric motor (MG01);
- 8. Primary Crusher Discharge Conveyor (CV01) with 30-hp electric motor and equipped with water sprays;
- 9. Coarse Ore Stacker with 75-hp electric motor (CV02);
- 10. NESCO water spray dust control system 10 hp (DC01);
- 11. Air Compressor -10 hp;

#### **Secondary:**

- 12. Coarse Ore Feeder with 5-hp electric motor (FD01);
- 13. Coarse Ore Feeder with 5-hp electric motor (FD02);
- 14. Coarse Ore Feeder with 5-hp electric motor (FD03);
- 15. Primary Screen Conveyor with 125-hp electric motor (CV03);
- 16. Primary Screen with 60-hp electric motor (SC01);
- 17. Cone Crusher feed conveyor 15-hp (CV04);
- 18. Cone Crusher with 751-hp WEG electric motor (CR02); revised
- 19. Cone Crusher Cooling Fan with 5-hp electric motor;
- 20. Cone Crusher Hydroset Pumps two pumps one 5.5 hp and one 4 hp
- 21. Cone Crusher blower -0.75 hp;
- 22. Cone Crusher Pinion pump -0.5-hp;
- 23. Cone Crusher Produce Conveyor 50-hp electric motor (CV05);
- 24. Fine Ore Conveyor with 100-hp electric motor (CV06);
- 25. NESCO water spray dust control system 5 hp;
- 26. (2) -Crusher Water Dust Control Pumps 40 hp (each);

#### **Tertiary:**

- 27. HPGR Feed Conveyor 50 hp (CV07);
- 28. Bag House 75-hp (DC03);
- 29. Air Compressor 60 hp;
- 30. (2) HPGR motors 1350-hp (each) electric motor (CR03);
- 31. (2) -HPGR hydraulic 20-hp (each) electric motor;
- 32. HPGR Oil Pump 6-hp electric motor;
- 33. HPGR Oil Pump 6-hp electric motor;
- 34. HPGR Cooling Fan with 7.5-hp electric motor;
- 35. HPGR Cooling Fan with 7.5-hp electric motor;

- 36. HPGR Cooling Fan with 5-hp electric motor;
- 37. HPGR Cooling Fan with 5-hp electric motor;
- 38. HPGR Cooling Pump with 5-hp electric motor;
- 39. HPGR Cooling Pump with 5-hp electric motor;
- 40. Blower fluidization with 3-hp electric motor;
- 41. (2) -Screw Conveyor with (2) 7.5-hp (each) electric motor;
- 42. HPGR Project Conveyor with 30-hp electric motor (CV08);
- 43. Fine Ore Bin Vent Filter with 3-hp electric motor;
- 44. Agglomeration Drum 250-hp electric motor;

#### **Conveying and Stacking:**

- 45. Overland Conveyor 250 hp;
- 46. Mobil Tripper Cross Conveyor with 30-hp electric motor (CV10);
- 47. Mobil Tripper Cross Conveyor Drive Motor with 7.5-hp electric motor;
- 48. Mobil Tripper Cross Conveyor Drive Motor with 7.5-hp electric motor;
- 49. Mobil Tripper Cross Conveyor Hydraulic power pack with 20-hp electric motor;
- 50. Portable Ramp Conveyor with 60-hp electric (CV11);
- 51. Portable Ramp Conveyor with 60-hp electric (CV12);
- 52. Portable Ramp Conveyor with 60-hp electric (CV13);
- 53. Portable Ramp Conveyor with 60-hp electric (CV14);
- 54. Portable Standard Conveyor with 40-hp electric (CV15);
- 55. Portable Standard Conveyor with 40-hp electric (CV16);
- 56. Portable Standard Conveyor with 40-hp electric (CV17);
- 57. Portable Standard Conveyor with 40-hp electric (CV18);
- 58. Portable Standard Conveyor with 40-hp electric (CV19);
- 59. Portable Standard Conveyor with 40-hp electric (CV20);
- 60. Portable Standard Conveyor with 40-hp electric (CV21);
- 61. Portable Standard Conveyor with 40-hp electric (CV22);
- 62. Portable Standard Conveyor with 40-hp electric (CV23); 63. Portable Standard Conveyor with 40-hp electric (CV24);
- 64. Horizontal Feed Conveyor with 60-hp electric motor (CV25) (This includes 80 kw Cummins Powered Diesel Engine (Gen-Set);
- 65. Horizontal Conveyor Power Pack with 40-hp electric motor (CV26);
- 66. Horizontal Conveyor Travel Motor 20-hp electric motor;
- 67. Horizontal Conveyor Travel Motor 20-hp electric motor;
- 68. Radial Stacker with 100-hp electric motor;
- 69. Radial Stacker Hydraulic with 20-hp electric motor;
- 70. Radial Stacker Travel motor with 20-hp electric motor; and
- 71. Radial Stacker Travel motor with 20-hp electric motor.

- 1. Process shall be designed and operated as described in application for Authority to Construct and Supplemental Environmental Impact Report (SEIR). (Rule 210.1)
- 2. Conveyors shall be equipped with covers which shall be in place at all times when equipment is in operation. (Rule 210.1 BACT Requirement)
- 3. Grizzly and jaw crusher shall be equipped with water spray to control particulate emissions. (Rule 210.1)
- 4. Fine ore bin (Eq. No. 3323) shall be equipped with operational fabric collector with exhaust flow rate of 700-acfm. (Rule 210.1 BACT Requirement)
- 5. Fabric collector shall each be equipped with operational pressure differential indicator. (Rule 210.1)

- 6. Fabric collector shall each be equipped with pulse-jet cleaning mechanism. (Rule 210.1 BACT Requirement)
- 7. High pressure grinding roll (HPGR) shall be equipped with dust collector to minimize dust emissions. (Rule 210.1 BACT Requirement)
- 8. Jaw crusher throughput shall not exceed 17,200-tons/day. (Rule 210.1)
- 9. Primary screen throughput shall not exceed 26,500-tons/day. (Rule 210.1)
- 10. Cone crusher throughput shall not exceed 9,200-tons/day. (Rule 210.1)
- 11. HPGR throughput shall not exceed 18,000-tons/day. (Rule 210.1)
- 12. Golden Queen Mining Co. LLC shall control fugitive emissions from active haul roads by the application of chemical dust suppressant and (on days with no natural precipitation) watering of haul roads shall occur as necessary to control fugitive dust. (Rule 419, CH&SC Sec 41700 and per applicant)
- 13. Visible emissions from haul roads (at source of emissions) shall not exceed 20% opacity. (Rule 419 and CH&SC Sec 41700)
- 14. Facility-wide annual blasting shall not exceed an average of 30 million tons without reevaluation of associated risk and written approval from the Control Officer. (Rule 210.1, CH&SC Sec 41700)
- 15. Inactive waste rock storage piles (excluding Inactive Disturbed Areas as defined in District Rule 402) shall be watered or chemically treated to form non-erodible crust to minimize fugitive dust emissions. (Rule 419 and CH&SC Sec 41700)
- 16. Active waste rock piles shall be watered or chemically treated (or other dust control measures considered Reasonable Available Control Measures {RACM}). (Rule 419 and CH&SC Sec 41700)
- 17. Loading and unloading operations shall utilize minimum feasible drop height to reduce fugitive dust emissions. (Rule 419 and CH&SC Sec 41700)
- 18. Operator shall utilize water suppression as necessary to control dust emissions from material unloading. (Rule 419 and CH&SC Sec 41700)
- 19. Golden Queen Mining facility shall not result in the discharge from any source such quantities of air contaminants or other material which causes injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property. (Rule 419 and CH&SC Sec 41700)
- 20. Operator shall conduct post construction ambient monitoring of PM<sub>10</sub>. Locations of monitoring stations and procedures for data collection, compilation and reporting shall be submitted to the District in a Monitoring Protocol within sixty days of ATC issuance. Fully approved Monitoring Protocol shall stipulate commencement date of post construction
- 21. Ambient monitoring program and monitoring program shall be operational by commencement date. (Rules 209, 210.1, 419 and CH&SC Sec 41700)
- 22. Monitoring Protocol shall also address methods to determine PM<sub>10</sub> concentrations associated with PM<sub>10</sub> sources at the facility, PM<sub>10</sub> concentration action levels (as appropriate), and actions to be implemented at the facility in the event that action levels are triggered. (Rule 419, CH&SC Sec 41700 and per applicant)
- 23. Facility-wide waste rock storage piles shall not exceed 344 acres, excluding areas in which reclamation has occurred and active waste rock storage piles shall not exceed 155 acres. (Rule 419, CH&SC Sec 41700 and per applicant)
- 24. Screen covers shall always be in place during operation. (Rule 210.1)
- 25. Fabric collector ducting and connection shall be maintained leak-free. (Rule 210.1)
- 26. Fabric collector emissions shall not exceed 5% opacity. (Rule 210.1 BACT)
- 27. Fabric collector pulse-jet cleaning mechanism shall be provided with compressed air supply of adequate pressure and volume. (Rule 210.1)
- 28. Collected dust from fabric collector shall be disposed of in a manner preventing entrainment to atmosphere. (Rule 210.1)

- 29. Operator shall keep onsite records necessary to verify compliance with the operational conditions. (Rule 210.1)
- 30. Sixty days after achieving maximum production, but not later than 180 days after initial startup, fugitive emissions from truck unloading to the crushing plant and the jaw crusher shall not exhibit greater than 10% opacity. (40 CFR 60.382)
- 31. Facility operations shall comply with all particulate matter standards, record keeping, reporting, and test procedure requirements of 40 CFR Part 60, Subpart LL. (Rule 422, Subpart LL)

#### **COMPLIANCE TESTING REQUIREMENTS:**

Particulate Matter (PM10 & PM2.5):

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1 and 210.1)

#### **EMISSION LIMITS:**

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

(Filterable + Condensable):		
Ore Processing	2.03	lb/hr
_	40 77	11- / -1

48.77 lb/day 8.37 ton/year (12-month rolling avg.)

**Fine Ore Storage Bin Vent Fabric Collector**@ **700 acfm**0.01 gr/scf
0.06 lb/hr
1.44 lb/day

0.25 ton/year (12-month rolling avg.)

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day the source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 210.1 and 209)

<b>Facility</b>	<b>Emissions</b>	
<u>Number</u>	<u>Unit</u>	<u>Description of Source</u>
1223	005	<b>Binding Agents Receiving and Storage Operation</b>

#### **Emission Unit Equipment Description/Permit Conditions**

#### **Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Binding Agents Receiving and Storage Operation, including following equipment:

Binding Agents Receiving and Storage Operation with the following equipment:

- A. Primary 300-ton (22,000-gal) cement storage silo;
- B. Cement Silo Bin Vent Filter (on primary silo) with 7.5-hp electric motor;
- C. Screw Conveyor with 5-hp electric motor; and
- D. Fluidizer Blower, 2 Augers, Bin Vent.

- 1. Conveyors shall be equipped with covers which shall be in place at all times when equipment is in operation. (Rule 210.1 BACT Requirement)
- 2. Cement silo shall be equipped with operational fabric collector with exhaust flow rate of 700-acfm. (Rule 210.1 BACT Requirement)
- 3. Fabric collector shall each be equipped with operational pressure differential indicator. (Rule 210.1)
- 4. Fabric collector shall each be equipped with pulse-jet cleaning mechanism. (Rule 210.1 BACT Requirement)
- 5. Visible emissions from cement and unloading operations shall be less than 5% opacity or Ringelmann No. ¼ except for not more than three minutes in any one-hour. (Rule 210.1 BACT Requirement)
- 6. All piping, ducting, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
- 7. Fabric collector pulse-jet cleaning mechanism shall be provided with compressed air supply of adequate pressure and volume. (Rule 210.1)
- 8. Fabric dust collector shall be in operation when associated equipment is operated. (Rule 210.1)
- 9. Collected dust from fabric collector shall be disposed of in a manner preventing entrainment to atmosphere. (Rule 210.1)
- 10. Annual cement transferred shall not exceed 30,500-tons without prior District approval. (Rule 210.1)
- 11. Applicant shall maintain weekly records of cement throughput, and such records shall be maintained for a period not less than 2-years. (Rule 210.1)
- 12. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)
- 13. Air Pollution Control Officer (APCO) or any authorized representative shall have access to and copies of any record required to be kept under terms and conditions of permit. Furthermore, such persons shall have access to inspect any equipment, operation or method required in this permit, and to sample, or require sampling, of emissions from source. (Rule 107)

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Emission Unit 005 Permit Conditions

#### **COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1 and 210.1)

#### **EMISSION LIMITS:**

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

#### Particulate Matter (PM10 & PM2.5):

(Filterable + Condensable):

Cement Silo Loading 0.02 lb/hr 0.42 lb/day

0.07 ton/year (12-month rolling avg.)

Cement Silo Fabric Collector0.01gr/scf@ 700-acfm0.06lb/hr

1.44 lb/day

0.25 ton/year (12-month rolling avg.)

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

<b>Facility</b>	<b>Emissions</b>	
Number	<u>Unit</u>	<b>Description of Source</b>
1223	006	<b>Heap Leach Operation</b>

#### **Emission Unit Equipment Description/Permit Conditions**

#### **Federally Enforceable Conditions**

#### **EQUIPMENT DESCRIPTION:** Heap Leach Operation, including following equipment:

Phase 1 Heap Leach Facility with the following equipment:

- A. Pump Box two barren solution vertical turbine pumps each with 100-hp electric motors (200-hp total);
- B. Ponds -2 excess solution pumps with 15 hp electric motor (30-hp total);
- C. Ponds 2 submersible intermediate solution pumps w/ 57.7-hp electric motor (115.4 hp total);
- D. Two (2) intermediate solution booster pumps w/ 326-hp electric motor (652-hp total);
- E. Intermediate Solution Filters; and
- F. Intermediate Solution Strainer Bag Filter Tank

- 1. Process shall be designed and operated as described in application for Authority to Construct and Environmental Impact Report. (Rule 210.1)
- 2. Surface area of Phase 1 Heap Leach Facility (HLF-1) shall not exceed 205-acres. (Rule 210.1)
- 3. Heap leach piles shall be watered or chemically treated (or other dust control measures considered Reasonable Available Control Measures {RACM}) to minimize fugitive dust emissions. (Rule 419 and CH&SC Sec 41700)
- 4. Sodium cyanide solution concentration shall not exceed 0.05% NaCN in any pond or reservoir or solution applied to heap. (CH&SC Sec 41700)
- 5. Solution pH applied to heap and stored in barren ponds or reservoirs shall be maintained above 10, except during detoxification and closure. (CH&SC Sec 41700)
- 6. Operator shall conduct post construction ambient monitoring of HCN during operations and during detoxification and closure. Locations of monitoring stations, monitoring methods, and procedures for data collection, compilation and reporting shall be submitted to the District in a Monitoring Protocol prior to sixty days before project startup and be fully approved and operational within 60 days after project startup. (Rules 209, 210.1, 419 and CH&SC Sec 41700, 42303)
- 7. Monitoring Protocol for hydrogen cyanide (HCN) ambient monitoring shall address methods to determine hydrogen cyanide (HCN) concentrations associated with HCN sources at the facility, HCN concentration action levels (as appropriate), and actions to be implemented at the facility in the event that action levels are triggered. (CH&SC Sec 41700)
- 8. Adequate control shall serve each material transfer as needed to prevent visible emissions from exceeding 10% opacity. (Rule 210.1)
- 9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, and annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)
- 10. Owner/operator shall keep accurate records of daily NaCN consumption rate and make these records available for District inspection. (Rules 210.1 and 419)

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Emission Unit 006 Permit Conditions

#### **COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1 and 210.1)

#### **EMISSION LIMITS:**

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

#### **Volatile Organic Compounds (VOC):**

**Hydrogen Cyanide (HCN)** 

4.7 ppmv (CH&SC Sec 41700)

0.10 lb/hr

2.29 lb/day

836.55 lb/year (12-month rolling avg.)

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209, and 210.1)

<b>Facility</b>	<b>Emissions</b>	
Number	<u>Unit</u>	<b>Description of Source</b>
1223	007	Merrill-Crowe Facility

#### **Emission Unit Equipment Description/Permit Conditions**

#### **Federally Enforceable Conditions**

#### **EQUIPMENT DESCRIPTION:** Merrill-Crowe Facility, including following equipment:

- A. Press Blow-Down Air Compressor with 100-hp electric motor;
- B. Instrument air compressor with 20-hp electric motor;
- C. Two Press Feed Pumps with 150-hp electric motors;
- D. Clarification Pre-coat Pump with 30-hp electric motor;
- E. Barren Wash Solution Pump with 50-hp electric motor;
- F. Clarification Sludge Pump with 20-hp electric motor;
- G. De-aeration Vacuum Pump with 50-hp electric motor;
- H. Slag Slurry Pump with 7.5-hp electric motor;
- I. Lochhead Haggerty Model MR-40 Mercury Retort (200-kW/268.2-hp) Package Element with condenser, aftercooler/mist eliminator, and carbon scrubber columns;
- J. SIHI Model LPH 3404 vacuum pump (5-hp) serving MR-40E retort exhaust;
- K. Retort Chiller (35-kW/46-hp) with 1.5-hp water regulator pump serving condenser (new);
- L. 3,750-cfm retort furnace door exhaust fan with 3-hp electric motor (new);
- M. Lochhead Haggerty Model MR-15E Electric Mercury Retort Furnace (100-kW/134.1-hp) Package Element with condenser, aftercooler/mist eliminator, and carbon scrubber columns
- N. GAST Model 6606 V103 vacuum pump (5-hp) serving MR-15E retort exhaust
- O. Retort Chiller (17-kW/22-hp) with 1.5-hp water regulator pump serving condenser
- P. Refining Arc Furnace with thermal heating element (335-kW/449-hp) and the following emission control equipment;
  - 1. 4,000-cfm retort furnace door exhaust fan with 5-hp electric motor;
  - 2. Furnace wet scrubber:
  - 3. Wet scrubber air heater;
  - 4. LST baghouse dust collector served by furnace scrubber blower at rated at 6,000 CFM (new);
  - 5. Carbon adsorption bed with rain capped vertical stack;
  - 6. Exhaust blower fan serving furnace exhaust scrubber system with 25-hp electric motor;
- Q. Swamp Cooler with 25-hp electric motor;
- R. Two 15-hp Swamp Coolers, total of 30-hp electric motors;
- S. MCC Room Air Conditioner (23-kW/31-hp);
- T. Pre-coat mix tank agitator with 0 5-hp electric motor;
- U. Body feed mix agitator with 0.5-hp electric motor,
- V. DE Bin Vent Exhaust fan with 1.5-hp electric motor;
- W. Three 3-hp Exhaust Fans, Clarification Area, total of 9-hp electric motors;
- X. Three 3-hp Exhaust Fans, Refine Area, total of 12-hp electric motors;
- Y. Two 5-hp Hydraulic Power Packs for Clarification Filters, total of 15-hp electric motors;
- Z. Hydraulic Power Pack for Refining Furnace with 5-hp electric motor;
- AA. Precipitant Mixer with 12.3-hp (9.2 kW) electric motor;

- BB. Two 1.5-hp CN Metering Pumps, total of 3-hp electric motors;
- CC. Wet Scrubber Drain Pump with 3-hp electric motor serving mercury retort;
- DD. Retort Water Circulation Pump with 5-hp electric motor;
- EE. Cyanide Area Sump Pump with 3-hp electric motor;
- FF. Precipitation Area Sump Pump with 3-hp electric motor;
- GG. DE Settling Pond Sump Pump with 40-hp electric motor;
- HH. Mixer feeder motor -1.5 hp; and
- II. Body feed pump -1.5 hp.

#### **DESIGN CONDITIONS:**

- 1) Carbon adsorption system serving MR-40 Mercury retort shall have the following design specifications:
  - a) Minimum of two carbon tanks;
  - b) Carbon adsorption system shall be equipped with provisions to monitor gas stream temperature at the inlet to the carbon adsorber. (Rule 423, 40 CFR §63.11647(g));
  - c) Carbon adsorption system shall be monitored at exhaust and adsorption tank immediately before exhaust to monitor exhaust emissions and breakthrough emissions. (Rule 210.1 BACT Requirement)
- 2) Each fabric collector exhaust stack shall be equipped with adequate provisions facilitating collection of samples consistent with U.S. EPA test methods, i.e. capped sample ports in accessible locations of uniform flow. (Rule 108.1)
- 3) Each fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 4) Each fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)

- 1. Merrill-Crowe facility shall be equipped with weigh scale to weigh concentrate batches prior to processing in retort or melt furnace; weigh scale shall be maintained within ±5% accuracy. (Rule 423, 40 CFR §63.11646(a)(9) & (10))
- 2. Carbon adsorption system serving MR-15E Mercury retort shall have the following design specifications:
  - a. Minimum of two carbon tanks;
  - b. Carbon adsorption system shall be equipped with provisions to monitor gas stream temperature at the inlet to the carbon adsorber. (Rule 423, 40 CFR §63.11647(g)); and
  - c. Carbon adsorption system shall be monitored at exhaust and adsorption tank immediately before exhaust to monitor exhaust emissions and breakthrough emissions. (Rule 210.1 BACT Requirement)
- 3. Process shall be designed and operated as described in application for Authority to Construct and Environmental Impact Report. (Rule 210.1)
- 4. Mercury retorts and melt furnaces, including associated air pollution control equipment and monitoring equipment, shall be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions (Rule 423 Subpart EEEEEEE, 40 CFR \$63.63.11646(b))
- 5. During reagent handling operations, cyanide and dry product additives shall be handled in a manner which minimizes release into the atmosphere. (Rules 210.1 BACT Requirement and 419)

- 6. Owner/operator (o/o) shall monitor and maintain each carbon adsorber in accordance with the requirements of 40 CFR §63.11647(f). Specifically, o/o shall continuously sample and analyze the exhaust stream from the carbon adsorber for mercury using Method 30B up to one week that includes the period of the annual performance test. The o/o shall establish an upper operating limit for the process as determined using the mercury concentration measurements from Method 30B as calculated using equation 3 of 40 CFR §63.11647(f). The o/o shall sample an analyze the exhaust stream from the carbon adsorber for mercury at least monthly using Method 30B, when the mercury concentration reaches 75% of the operating limit, begin weekly sampling and analysis. When mercury concentration reaches 90% of the operating limit, replace the carbon in the carbon adsorber within 30 days. If mercury concentration exceeds the operating limit, change the carbon within 30 days and report the deviation to permitting authority. The o/o shall conduct initial sampling of carbon in the carbon bed 90 days after the replacement. (Rule 423 Subpart EEEEEEE)
- 7. Owner/operator shall monitor gas stream temperature at the inlet to the carbon adsorber for each mercury retort and melt furnace. A maximum value for the inlet temperature shall be established during the annual performance test (§ 63.11646(a)) according to the manufacturer's specifications, or as approved by your permitting authority. Monitor the inlet temperature once per <a href="mailto:shift">shift</a>. If an inlet temperature exceeds the temperature operating limit, you must take corrective actions to get the temperature back within the parameter operating limit within 48 hours. If the exceedance persists, within 144 hours of the exceedance, you must sample and analyze the exhaust stream from the <a href="mailto:carbon adsorber">carbon adsorber</a> using Method 30B and compare to an operating limit. (Rule 423 Subpart EEEEEEE §63.11647(g))
- 8. Owner/operator shall record the number of one-hour periods each melt furnace and mercury retort operates during each month. ((Rule 423, 40 CFR §63.63.11646(a))
- 9. Owner/operator shall measure the weight of concentrate for each batch prior to processing in mercury retorts. (Rule 423 Subpart EEEEEEE, 40 CFR §63.63.11646(a))
- 10. Owner/operator shall record the weight of concentrate (in tons) processed in mercury retorts on a daily and monthly basis. (Rule 423 Subpart EEEEEEE, 40 CFR §63.63.11646(a))
- 11. Owner/operator shall keep accurate records of daily mercury emission rate from mercury retort and melt furnace, precipitate processed by the mercury retort and crucible furnace, and make these records available for District inspection. (Rules 210.1 and Rule 419)
- 12. Owner/operator shall comply with notification and reporting requirements of 40 CFR §63.11648. (Rule 423 Subpart EEEEEEE)
- 13. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, and annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC §41700)

#### **MR-40 Mercury Retort:**

- 14. Mercury retort shall be electrically heated. (Rule 210.1)
- 15. Operation of Mercury Retort shall not exceed 8,760-hours per year. (Rule 210.1)
- 16. Exhaust flow rate from carbon adsorber shall not exceed 40-acfm. (Rule 210.1)
- 17. Mercury emissions shall not exceed 0.1 lb/ton of concentrate processed. (Rule 423, 40 CFR §63.1145(h))
- 18. Visible emissions from carbon scrubber shall be less than 5% opacity or Ringelmann ¼ except for not more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
- 19. Mercury collected from retort shall be disposed of in a manner preventing release to atmosphere. (Rule 210.1)

#### **MR-15E Mercury Retort:**

- 20. Mercury retort shall be electrically heated. (Rule 210.1 BACT Requirement)
- 21. Operation of Mercury Retort shall not exceed 8,760-hours per year. (Rule 210.1)
- 22. Exhaust flow rate from carbon adsorber shall not exceed 29-cfm. (Rule 210.1)
- 23. Mercury emissions shall not exceed 0.1 lb/ton of concentrate processed. (Rule 423, 40 CFR §63.1145(h))
- 24. Visible emissions from carbon scrubber shall be less than 5% opacity or Ringelmann ¼ except for not more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
- 25. Mercury collected from retort shall be disposed of in a manner preventing release to atmosphere. (Rule 210.1)

#### **Melt Furnace:**

- 26. Melt furnace shall be electrically heated. (Rule 210.1)
- 27. Operation of Melt Furnace shall not exceed 4,350-hours per year. (Rule 210.1)
- 28. Furnace emissions shall be vented through fully operational wet scrubber, dust collector, and carbon absorber. (Rule 210.1 BACT Requirement and CH&SC §41700)
- 29. Wet Scrubber serving melt furnace exhaust shall have the following design specifications:
- a. Exhaust flow rate not to exceed 6,000-acfm;
- b. Equipped with operational pressure differential indicator, and
- c. Equipped scrubber liquor maintenance system. (Rule 210.1 BACT Requirement)
- 30. All piping, ducting, and connections to dust collection systems shall be leak-free and shall have no visible emissions. (Rule 210.1)
- 31. Collected dust from wet scrubber and dust collector shall be disposed of in a manner preventing release to atmosphere. (Rule 210.1)
- 32. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf. (Rule 404.1)
- 33. Visible emissions from melt furnace exhaust shall not exceed 5% opacity. (Rule 210.1)
- 34. Fabric collector shall be maintained in proper working order. (Rule 210.1)
- 35. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)

#### STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

#### **COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified within 60 days of District request. Test results shall be submitted to the District within 30 days after test completion. (Rule 108.1 and 209)

#### **EMISSION LIMITS**:

Maximum emissions rate of each air contaminant from this emission unit shall not exceed following limits:

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**Emission Unit 007 Permit Conditions** 

**Melt Furnace Wet Scrubber:** 

Particulate Matter (PM10 & PM2.5):0.007gr/scf(Filterable + Condensable):0.36lb/hr8.64lb/day

0.80 ton/year (12-month rolling avg.)

Mercury (Hg): 0.006 lb/hr

0.001 lb/day

2.39 lb/year (12-month rolling avg.)

**Lochhead Haggerty MR-40 Mercury Retort:** 

Mercury (Hg):

2.06 x 10-4 lb/hr 0.005 lb/day

1.81 lb/year (12-month rolling avg.)

**Lochhead Haggerty MR-15E Mercury Retort:** 

Mercury (Hg):

1.78x10<sup>-4</sup> lb/hr 0.004 lb/day

1.30 lb/year (12-month rolling avg.)

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rule 210.1)

<u>Facility</u> <u>Number</u>	Emissions Unit	<b>Description of Source</b>
1223	008	Assay Laboratory

#### **Emission Unit Equipment Description/Permit Conditions**

#### **Federally Enforceable Conditions**

#### **EQUIPMENT DESCRIPTION:** Assay Laboratory, including following equipment:

#### A. Preparation and fire assay area:

- 1. Two (2) Drying ovens with heat load of 25-kW (33.5-hp);
- 2. Jaw Crusher equipped with dust control hood vented to dust collector;
- 3. Two Pulverizers each equipped with 3-hp motor and dust control hood vented to dust collector;
- 4. Two Electric Assay Fusion Furnaces each with heat load of 25-kW or 25-kV (power factor of 1) (33.5-hp) and vented to dust collector via fume hood;
- 5. Fire assay/furnace preparation table with fume hood vented to dust collector;
- 6. North work preparation table (fire assay flux) with fume hood vented to dust collector;
- 7. Electric Assay Cupellation Furnace with heat load of 50-kW (67-hp) and vented to dust collector via fume hood:
- 8. Cress table top electric furnace (26"x28"x24") model AC136 with input power of 3-kW and vented to dust collector via fume hood;
- 9. Fabric Collector (serving fire assay/furnace section) with 15 hp motor and equipped with MERV 15 nano fiber canister cartridges;
- 10. Fabric collector (serving dust from pulverizing/crushing section) with 15-hp electric motor and equipped with MERV 15 nano fiber canister cartridges;

#### B. Wet laboratory:

- 1. Hydrochloric and Nitric acid work stations equipped with (SW) fume hood and vented to wet scrubber system;
- 2. Sodium Hydroxide and sodium cyanide work stations with (SE) fume hood and vented to wet scrubber system;
- 3. Mercury and cyanide work stations equipped with (W) fume hood and vented to wet scrubber system:
- 4. Two fume hoods serving two spectrometer instruments and vented to atmosphere;
- 5. Fume Wet Scrubber system (decommissioned to remain on-site) including the following:
  - a. Prolite, Model #40, with 7.5 hp centrifugal fan motor and rated at 4000 cfm;
  - b. Fume hood scrubber pump with 2-hp motor; and
  - c. Fume hood fan with 1-hp motor.

- 1. General production/preparation area shall be equipped with operational fabric collector with exhaust flow rate of 700-acfm. (Rule 210.1 BACT Requirement)
- 2. Furnace section shall be equipped with operational fabric collector with exhaust flow rate of 1000-acfm. (Rule 210.1 BACT Requirement)

- 3. Each fabric collector shall each be equipped with operational pressure differential indicator. (Rule 210.1)
- 4. Each fabric collector shall each be equipped with pulse-jet cleaning mechanism. (Rule 210.1 BACT Requirement)
- 5. Visible emissions from each fabric collector shall be less than 5% opacity or Ringelmann No. ¼ except for not more than three minutes in any one-hour. (Rule 210.1 BACT Requirement)
- 6. Fabric collector pulse-jet cleaning mechanism shall be equipped with compressed air supply of pressure and volume in accordance with manufacturer's specifications. (Rule 210.1)
- 7. Overhead exhausts hoods and related fabric dust collectors shall be in operation when associated particulate matter generating equipment is operated. (Rule 210.1)
- 8. All piping, ducting, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
- 9. Collected dust from fabric collector shall be disposed of in a manner preventing entrainment to atmosphere. (Rule 210.1)
- 10. Waste materials shall be managed in compliance with California and Federal requirements applicable to solid wastes, hazardous wastes, or recyclable materials. (Rule 410.3)
- 11. Material processed by Assay Laboratory shall be limited to the following: solid samples, solution samples, and fire assay. (Rule 210.1)
- 12. Toxic substances including acid solutions used in wet laboratory shall be limited to NaHCN, HCL, HNO3, and NAOH. (Rule 208.1)
- 13. Air Pollution Control Officer (APCO) or any authorized representative shall have access to and copies of any record required to be kept under terms and conditions of permit. Furthermore, such persons shall have access to inspect any equipment, operation or method required in this permit, and to sample, or require sampling, of emissions from source. (Rule 107)
- 14. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format for a period of 5 years. (Rule 209)
- 15. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)

#### **COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1 and 210.1)

#### **EMISSION LIMITS:**

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

#### Particulate Matter (PM10 & PM2.5):

(Filterable + Condensable): Furnace Fabric Collector

 Furnace Fabric Collector
 0.01 gr/scf

 @ 1,000-acfm
 0.09 lb/hr

 1.03 lb/day

0.18 ton/year (12-month rolling avg.)

Emission Unit 008 Permit Conditions

General Production Fabric Collector	0.01	gr/scf
@ 700-acfm	0.06	lb/hr
	0.72	lb/day
	0.13	ton/year (12-month rolling avg.)

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 009 Permit Conditions

<b>Facility</b>	<b>Emissions</b>	
Number	<u>Unit</u>	<b>Description of Source</b>
1223	009	<b>Emergency Generator Set</b>

# **Emission Unit Equipment Description/Permit Conditions**

# **Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Emergency Generator Set, including following equipment:

1250-kW Cummins emergency generator set, Model DQGAB, driven by 2220-bhp Cummins, Model QSK50-G4 NR2, diesel fueled piston engine.

# **OPERATIONAL CONDITIONS:**

- 1. Engine operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
- 2. Engine shall be equipped with turbocharger and aftercooler. (Rule 210.1 BACT Requirement)
- 3. Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (Rule 210.1)
- 4. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (low sulfur content, 0.0015% by weight). (Rule 210.1 BACT Requirement)
- 5. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not equal or exceed 5% opacity or Ringelmann No. ¼ for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
- 6. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft<sup>3</sup> of gas at standard conditions. (Rule 404.1)
- 7. Engine operation for maintenance and testing shall not exceed 50 hours per year without prior District approval. (ATCM: Title 17, CCR section 93115)
- 8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rule 210.1)
- 9. Compliance with all operational conditions shall be verified by appropriate recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 427)
- 10. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, date(s) fuel was supplied, and engine check(s) including: air filters, fuel filters, oil filters, engine oil, exhaust system, coolant, and spark plugs (if so equipped). (Rule 427)
- 11. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

# STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

Emission Unit 009 Permit Conditions

# **COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits on any fabric collector(s) shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

# **EMISSION LIMITS:**

Maximum emissions rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM10 & PM2.5):	0.15	gm/bhp-hr (CCR 93115)
(Filterable + Condensable):	0.73	lb/hr
	17.62	lb/day
	0.07	ton/year (12-month rolling avg.)
Sulfur Oxides (SOx as SO <sub>2</sub> ):	0.022	lb/hr
-	0.522	lb/day
	0.002	ton/year (12-month rolling avg.)
Oxides of Nitrogen (NOx as NO <sub>2</sub> ):	4.60	gm/bhp-hr (CCR 93115)
	22.52	
	540.48	lb/day
	2.25	ton/year (12-month rolling avg.)
Volatile Organic Compounds (VOC):	0.20	gm/bhp-hr (CCR 93115)
(as defined in Rule 210.1)	0.98	lb/hr
	23.49	lb/day
	0.10	ton/year (12-month rolling avg.)
Carbon Monoxide:	2.60	gm/bhp-hr (CCR 93115)
	12.73	lb/hr
	305.45	lb/day
	1.27	ton/year (12-month rolling avg.)

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rule 210.1)

Emission Unit 010 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<b>Description of Source</b>
1223	010	Gasoline Dispensing Facility with Aboveground Storage Tank

# **Emission Unit Equipment Description/Permit Conditions**

# **Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Gasoline Storage and Dispensing Facility with Aboveground Storage Tank, including following equipment:

- A. 1,000-gallon Fireguard aboveground gasoline storage tank with a permanently affixed fill tube terminating no more than six inches from bottom of tank and provisions for collection of gasoline vapors during filing (Phase I);
- B. Phase I (filling of storage tank) vapor recovery system (Executive Order: VR-401-E) including the following <u>CARB certified</u> components:

	<u>Component</u>	Manufacturer/Model Number
1.	Spill Container	OPW 6211R-302B3LD
2.	Liquid Dust Cap	OPW 634B-0200
3.	Liquid Adaptor	OPW 1612AN-0300
4.	Vapor Dust Cap	OPW 1711T-7085-EVR
5.	Vapor Adaptor	OPW 1611AV-1605
6.	Drop Tube Overfill Prevention Device	OPW 61F-STOP-3050T
7.	Drop Tube	OPW 61FT-0312
8.	Pressure/Vacuum Vent Valve	Husky 5885

- C. Dresser-Wayne G6201D/2GJ fuel dispenser equipped with one product nozzle; and
- D. Vapor-assist type Phase II (fueling of vehicle tank) vapor collection system (Executive Order: VR-501-A) including the following <u>CARB certified</u> components:

	Component	<u> Manufacturer/Model Number</u>
1.	Nozzle	Emco-Wheaton A4005EVR
2.	Swivel	Emco-Wheaton A4110EVR-001
3.	Flow Limiter	OPW 44N-1044
4.	Vapor Check Valve	OPW 82RV-2405
5.	Coaxial Hose	Goodyear Maxxim Premier Plus
6.	Breakaway Coupling	Emco-Wheaton A4119EVR
7.	Dispenser	Dresser-Wayne G6201D/2GJ

# **OPERATIONAL CONDITIONS:**

- 1. Storage/dispensing facility shall be equipped with California Air Resources Board (ARB) certified Phase I (filling of storage tanks) and Phase II (fueling of vehicle) gasoline vapor control systems. (Rules 412 and 412.1)
- 2. Gasoline storage tanks shall be equipped with two-point Phase I vapor control system. (Rule 412)
- 3. Tank shall be equipped with pressure/vacuum relief valve set to within 10% of maximum working pressure of tank. (Rule 412)

#### Emission Unit 010 Permit Conditions

- 4. Gasoline usage for aboveground storage tank shall not exceed 250,000 gallons per year without prior District approval. (Rule 210.1)
- 5. Vapor control system shall be of California Air Resources Board (CARB) certified design and installed, operated, and maintained in accordance with manufacturer's recommendation to prevent at least 95% by weight of all gasoline vapors from entering atmosphere. (Rules 412 and 412.1)
- 6. All Phase I (filling of storage tank) vapor recovery equipment shall be used when tanks are filled. (Rule 412)
- 7. Phase II (filling of vehicle tank) vapor recovery equipment shall be maintained according to manufacturer's recommendations and used when vehicles tanks are filled. (Rule 412.1)
- 8. Gasoline flow through any nozzle shall not exceed 10 gallons per minute. (Rule 412.1)
- 9. Tank shall be equipped with permanently submerged fill pipe terminating no more than six inches from bottom of tank. (Rule 412)
- 10. The vapor recovery systems and their components shall be operated and maintained in accordance with the State certification requirements. (Rules 412 and 412.1)
- 11. No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo tank which attests to the vapor integrity of the tank. (Rule 412)
- 12. Vapor recovery systems and gasoline dispensing equipment shall be maintained leak-free. A "leak" is defined as the dripping of liquid volatile organic compounds at a rate of three or more drops per minute, or vapor volatile organic compounds in excess of 10,000-ppm as equivalent methane as determined by EPA Test Method 21. (Rule 412.1)
- 13. The permittee shall perform the required maintenance as specified in ARB-Approved Installation and Maintenance Manual for the Phase I Vapor Recovery System. (Rule 412)
- 14. The permittee shall perform and pass a pressure integrity test on all pressure/vent (PV) valves at the facility in accordance with ARB Test Procedure TP-201.1E at least once every 12 months. (Rule 210.1)
- 15. The permittee shall perform and pass a Static Pressure Performance Test using ARB TP-206.3 at least once every twelve (12) months. (Rule 210.1)
- 16. The operator shall conduct periodic maintenance inspections based on the amount of gasoline dispensed by the facility in a calendar month as follows:
  - a. Less than 25,000 gallons per month one day per week;
  - b. Greater than or equal to 25,000 gallons per month five days per week.
  - All inspections shall be documented within the O&M manual. (Rule 412.1)
- 17. The operator shall maintain monthly gasoline throughput records. (Rule 412.1)
- 18. All records required by this permit shall be retained on-site for a period of at least three years, and shall be made available for inspection upon request. (Rule 412.1)
- 19. The operator shall maintain on the premises a log of any repairs made to the certified Phase I or Phase II vapor recovery system. The repair log shall include the following:
  - a. Date and time of each repair;
  - b. Name of the person(s) who performed the repair, and if applicable, the name, address and phone number of the person's employer;
  - c. Description of service performed;
  - d. Each component that was repaired, serviced, or removed;
  - e. Each component that was installed as replacement, if applicable; and
  - f. Receipts or other documents for parts used in the repair and, if applicable, work orders which shall include the name and signature of the person responsible for performing the repairs. (Rule 412.1)
- 20. Any tank with vapor recovery system having defect shall not be operated until defect has been repaired, replaced, or adjusted as necessary to correct defect, and District has re-inspected system or

#### Emission Unit 010 Permit Conditions

- has authorized its use pending re-inspection. All such defects shall be tagged "out of service" upon detection. (Rule 412 and 412.1)
- 21. Phase I and Phase II Vapor Recovery Systems shall be installed, started up, maintained and repaired only by person(s) certified by the system manufacturer(s) to perform such work. A copy of such person's certification shall be kept in the facility's repair log. (Rule 412.1)
- 22. The District shall be notified by the permittee 30 days prior to each test. The test results shall be submitted to the District no later than 30 days after each test. (Rule 108.1)
- 23. The District shall be notified within 24 hours of the facility's pass/fail status after the performance of each test. (District Rule 108.1)
- 24. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)

# **COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1 and 210.1)

# **SPECIAL CONDITIONS**:

- aa. Vapor-return and/or vapor control systems used to comply with requirements of this Permit to Operate shall comply with all safety, fire, weights and measures, and other applicable codes and/or regulations. (Rule 412)
- bb. Equipment shall be installed and tested in accordance with CARB Executive Orders VR-401-E and VR-501-A. (Rule 412 and 412.1)
- cc. System and components shall be of California Air Resources Board certified design, any component changes shall be approved in advance by the District. (Rule 412 and 412.1)

Emission Unit 011 Permit Conditions

<b>Facility</b>	<b>Emissions</b>	
Number	<u>Unit</u>	<b>Description of Source</b>
1223	011	Blast Hole Drilling Rig

# **Emission Unit Equipment Description/Permit Conditions**

# **Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Blast Hole Drilling Rig, including following equipment and design specifications:

Atlas-Copco, Model DM-45, Self- Propelled, Blast Hole Drilling Rig No. 5, powered by an 617-bhp, Mercedes-Benz, MTU, Model 10v1600C70, Tier 4 EPA certified diesel piston engine (permit exempt mobile engine).

# **OPERATIONAL CONDITIONS:**

- 1. Operation of Drilling Rig No. 5 shall not exceed 7,898 hours per year without District approval. (Rule 210.1)
- 2. Blast hole drill rig shall be equipped with water injection to minimize drilling dust emission. (Rule 210.1 BACT Requirement)
- 3. Drilling unit shall not exceed 80 holes/day without prior District approval. (Rule 210.1)
- 4. Drilling shall not take place unless dust control equipment is operational and utilized. (Rule 210.1)
- 5. Visible Emissions from hole in the process of being drilled shall not exceed 20% opacity or Ringelmann No. 1 for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement).
- 6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1)
- 7. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of five years, and made available upon request or District personnel. Record shall include, at minimum, number of holes, days and hours of operation. (Rules 209 and 210.1)
- 8. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request or District personnel. Record shall include, at minimum, days and hours of operation.
- 9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH & SC 41700)

#### **COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1 and 210.1)

**Emission Unit 011 Permit Conditions** 

# **EMISSION LIMITS:**

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

**Hole Drilling Emissions:** 

Particulate Matter (PM10 & PM2.5):

(Filterable + Condensable): 0.166 lb/hr

3.64 lb/day

0.65 ton/year (12-month rolling avg.)

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209, and 210.1)

**Emission Unit 012 Permit Conditions** 

<b>Facility</b>	<u>ity Emissions</u>		
Number	Unit	<b>Description of Source</b>	
1223	012	Generator Set	

# **Emission Unit Equipment Description/Permit Conditions**

# **Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** 120-kW Generator Set Driven by 240-bhp Diesel Fueled Piston Engine, including following equipment and design specifications:

120-kW Multiquip generator set, Model DCA-150SSJU4F, driven by 240-bhp John Deere, Model 6068HFG08, diesel fueled piston engine.

# **OPERATIONAL CONDITIONS:**

- 1. Engine shall be equipped with turbocharger and aftercooler. (Rule 210.1 BACT Requirement)
- 2. Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (Rule 210.1)
- 3. Engine shall be equipped with a permanently affixed placard readily available for inspection with the following engine information: brake horsepower, make, model, serial number and Tier number. (Rule 210.1)
- 4. Engine operation shall not exceed 8,760 hours per year without prior District approval. (Rule 210.0)
- 5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (low sulfur content, 0.0015% by weight). (Rule 210.1 BACT Requirement)
- 6. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not equal or exceed 5% opacity or Ringelmann No. ¼ for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
- 7. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft<sup>3</sup> of gas at standard conditions. (Rule 404.1)
- 8. Engine shall comply with the requirements of California Code of Regulations (CCR), Title 17, Section 93115 (Airborne Toxic Control Measure for Stationary Compression Ignition (CI) Engines). (CCR Title 17, Section 93115 93115.15)
- 9. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rule 210.1)
- 10. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
- 11. Permittee shall comply with Rule 427, Section V (Requirements for Engines Greater than 50-bhp) and Section VIII (Administrative Requirements) for subject diesel fueled piston engine. (Rule 427)
- 12. Permittee shall maintain an engine service log demonstrating compliance with Section V of Rule 427 and make such log readily available to District personnel. (Rule 427)
- 13. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)

Emission Unit 012 Permit Conditions

# **STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:**

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

# **COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveals conditions indicative of non-compliance, compliance with diesel piston engine emission limitations shall be verified within 60 days of District request. Test results shall be submitted to the District within 30 days after test completion. (Rule 108.1 and 209)

#### **EMISSION LIMITS:**

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM10 & PM2.5):	0.01	gm/bhp-hr (CCR 93115)
(Filterable + Condensable):	0.001	lb/hr
	0.024	lb/day
	0.004	ton/year (12-month rolling avg.)
Sulfur Oxides (SOx as SO <sub>2</sub> ):	0.002	lb/hr
	0.04	lb/day
	0.01	ton/year (12-month rolling avg.)
Oxides of Nitrogen (NOx as NO <sub>2</sub> ):	0.30	gm/bhp-hr (CCR 93115)
	0.06	lb/hr
	1.44	lb/day
	0.26	ton/year (12-month rolling avg.)
<b>Volatile Organic Compounds (VOC):</b>	0.14	gm/bhp-hr (CCR 93115)
(as defined in Rule 210.1)	0.01	lb/hr
	0.24	lb/day
	0.04	ton/year (12-month rolling avg.)
Carbon Monoxide:	2.60	gm/bhp-hr (CCR 93115)
	0.01	lb/hr
	0.24	lb/day
	0.04	ton/year (12-month rolling avg.)

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209, and 210.1)

Emission Unit 013 Permit Conditions

<b>Facility</b>	<b>Emissions</b>	
<u>Number</u>	<u>Unit</u>	<b>Description of Source</b>
1223	013	Fuel Additive Storage Tank

# **Emission Unit Equipment Description/Permit Conditions**

# **Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Fuel Additive Storage Tank, including the following equipment and design specifications:

1,000-gallon fixed roof, atmosphere-vented storage tank

# **OPERATIONAL CONDITIONS:**

- 1. Tank shall be painted white. (Rule 210.1 BACT Requirement)
- 2. Tank shall be equipped with PV-vent set to within 10% of maximum allowable pressure. (Rule 210.1 BACT Requirement)
- 3. Transfer of fuel additive into tank shall not exceed 1,000-gallons/year. (Rule 210.1)
- 4. Only Power Mix 1000 ULSD No. 513W Fuel Treatment shall be stored in the tank. (Rule 210.1)
- 5. Equipment shall be maintained according to manufacturer specifications to ensure compliance with emission limitations. (Rule 210.1)
- 6. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format and maintained for a minimum period of three years. (Rule 209)
- 7. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)

**Emission Unit 014 Permit Conditions** 

<u>Facility</u> <u>Number</u>	Emissions Unit	<b>Description of Source</b>
1223	014	Blast Hole Drilling Operation

# **Emission Unit Equipment Description/Permit Conditions**

# **Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Blast Hole Drilling Operation, including the following equipment and design specifications:

Atlas-Copco DM45 Blast Hole Drilling Rig (Drill No. 6) with 755-bhp MTU 10V 1600, Tier 4 diesel piston engine (propels drill rig).

# **OPERATIONAL CONDITIONS:**

- 1. Blast hole drill rig shall be equipped with water injection device to minimize drilling dust emissions. (Rule 210.1 BACT Requirement)
- 2. Operation of Drill No. 6 shall not exceed 8760 hours per year without District approval. (Rule 210.1)
- 3. Drilling from Drill No. 6 shall not exceed 80 holes/day without prior District approval. (Rule 210.1)
- 4. Drilling using Drill No. 6 shall not take place unless water injection device is operational and utilized. (Rule 210.1)
- 5. Visible Emissions from hole in the process of being drilled shall not exceed 20% opacity or Ringelmann No. 1 for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement).
- 6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1)
- 7. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
- 8. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request or District personnel. Record shall include, at minimum, days and hours of operation
- 9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH & SC 41700)

# STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

# **COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to the District within 30 days after test completion. (Rule 108.1 and 210.1)

**Emission Unit 014 Permit Conditions** 

# **EMISSION LIMITS:**

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

# **Hole Drilling Emissions:**

# Particulate Matter (PM10 & PM2.5):

(Filterable + Condensable):

0.15 lb/hr 3.64 lb/day

0.66 ton/year (12-month rolling avg.)

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with all daily emissions limits shall be verified by appropriate record keeping. Such records shall be kept on site in readily available format. (Rule 210.1)

Emission Unit 016 Permit Conditions

FacilityEmissionsNumberUnit	<b>Description of Source</b>	
1223	016	Blast Hole Drilling Operation

# **Emission Unit Equipment Description/Permit Conditions**

# **Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Blast Hole Drilling Operation, including the following equipment and design specifications:

Epiroc, Model DML, Self- Propelled, Blast Hole Drilling Rig (Drilling Rig No. 7) with Caterpillar C18, 755-bhp, Tier 4 diesel piston engine (permit exempt mobile engine).

# **OPERATIONAL CONDITIONS:**

- 1. Blast hole drill rig shall be equipped with dust skirt and water injection. (Rule 210.1 BACT Requirement)
- 2. Operation of Drilling Rig No. 7 shall not exceed 8,760 hours per year without District approval. (Rule 210.1)
- 3. Drilling unit shall not exceed 80 holes/day without prior District approval. (Rule 210.1)
- 4. Drilling shall not take place unless dust control equipment is operational and utilized. (Rule 210.1)
- 5. Visible Emissions from hole in the process of being drilled shall not exceed 20% opacity or Ringelmann No. 1 for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
- 6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1)
- 7. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
- 8. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of five years, and made available upon request or District personnel. Record shall include, at minimum, days and hours of operation
- 9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH & SC §41700)

# STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

# **COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to the District within 30 days after test completion. (Rule 108.1 and 210.1)

**Emission Unit 016 Permit Conditions** 

# **EMISSION LIMITS:**

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

# Particulate Matter (PM10 & PM2.5):

(Filterable + Condensable):

# **Hole Drilling Emissions:**

0.22 lb/hr

5.30 lb/day

0.97 ton/year (12-month rolling avg.)

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with all daily emissions limits shall be verified by appropriate record keeping. Such records shall be kept on site in readily available format. (Rule 210.1)

**Emission Unit 017 Permit Conditions** 

<u>Facility</u> <u>Number</u>	Emissions <u>Unit</u>	<b>Description of Source</b>
1223	017	Blast Hole Drilling Operation

# **Emission Unit Equipment Description/Permit Conditions**

# **Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Blast Hole Drilling Operation, including the following equipment and design specifications:

Epiroc model T45-10SF Self-Propelled, Blast Hole Drilling Rig (DR No. 9), powered by Caterpillar model C9.3, 340-bhp, Tier 4 EPA certified diesel piston engine (permit exempt mobile engine).

# **DESIGN CONDITIONS:**

a. Blast hole drill rig shall be equipped with dust collector or water injection and dust skirt to minimize drilling dust emission. (Rule 210.1 BACT Requirement)

#### **OPERATIONAL CONDITIONS:**

- 1. Operation of Drilling Rig No. 2 shall not exceed 7000 hours per year without District approval. (Rule 210.1)
- 2. Drilling unit shall not exceed 80 holes/day without prior District approval. (Rule 210.1)
- 3. Drilling shall not take place unless dust control equipment is operational and utilized. (Rule 210.1)
- 4. Visible Emissions from hole in the process of being drilled shall not exceed 20% opacity or Ringelmann No. 1 for more than 3 minutes in any one hour (Rule 210.1 BACT Requirement).
- 5. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1)
- 6. Compliance with all operational conditions shall be verified by appropriate recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
- 7. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request or District personnel. Record shall include, at minimum, days and hours of operation
- 8. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH & SC 41700)

# **STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:**

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

**Emission Unit 017 Permit Conditions** 

# **COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to the District within 30 days after test completion. (Rule 108.1 and 210.1)

# **EMISSION LIMITS:**

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

# Particulate Matter (PM10 & PM2.5):

(Filterable + Condensable):

# **Hole Drilling Emissions:**

0.22 lb/hr 5.30 lb/day

0.77 ton/year (12-month rolling avg.)

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and recordkeeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be maintained and made readily available to District for period of five years. (Rule 210.1)

# FEDERAL REGULATIONS 40 CFR 60 SUBPART A General Provisions

Applicable provisions of 40 CFR 60 Subpart A shall apply.

[40 FR 53346, Nov. 17, 1975, as amended at 55 FR 51382 Dec. 13, 1990; 59 FR 12427, Mar. 16, 1994; 62 FR 52641, Oct. 8, 1997; 88 FR 80542, Nov. 17, 2023]

# **Applicability**

§60.1(a)	Except as provided in subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
Any new or revised standard of performance promulgated pursuant to section 111(b) apply to the owner or operator of any stationary source which contains an affected facility or modification of which is commenced after the date of publication in this part of such no standard (or, if earlier, the date of publication of any proposed standard) applicable to that	
§60.1(c)	In addition to complying with the provisions of this part, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution control agency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Title V of the Clean Air Act (Act) as amended November 15, 1990 (42 U.S.C. 7661). For more information about obtaining an operating permit see part 70 of this chapter.
Except for compliance with 40 CFR 60.49b(u), the site shall have the option of either comdirectly with the requirements of this part, or reducing the site-wide emissions caps in accordance procedures set forth in a permit issued pursuant to 40 CFR 52.2454. If the site chooses the option the site-wide emissions caps in accordance with the procedures set forth in such permit, the requirements of this part.	
§60.1(a)(3)	Notwithstanding the provisions of paragraph (d)(2) of this section, for any provisions of this part except for Subpart Kb, the owner/operator of the site shall comply with the applicable provisions of this part if the Administrator determines that compliance with the provisions of this part is necessary for achieving the objectives of the regulation and the Administrator notifies the site in accordance with the provisions of the permit issued pursuant to 40 CFR 52.2454.

# FEDERAL REGULATIONS 40 CFR PART 60 SUBPART LL

# **Standards of Performance for Metallic Mineral Processing Plants**

Applicable provisions of 40 CFR Part 60 Subpart LL shall apply.

[49 FR 6464, Feb 21, 1984; as amended at 79 FR 11250, Feb. 27, 2014)

Subject	All equipment listed in the following permits: 1223004
Emission Units	
Permit Number	

# **Standard for Particulate Matter**

§60.382	(a) On and after the date on which the performance test required to be conducted by \$60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from an affected facility any stack emissions that:
	(1) Contain particulate matter in excess of 0.05 grams per dry standard cubic meter (0.05 g/dscm).
	(2) Exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing emission control device.
	(b) 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.

# Reconstruction

§60.383	(a) The cost of replacement of ore-contact surfaces on processing equipment shall not be considered in calculating either the "fixed capital cost of the new components" or the "fixed capital cost that would be required to construct a comparable new facility" under §60.15. Ore-contact surfaces are: Crushing surfaces; screen meshes, bars, and plates; conveyor belts; elevator buckets; and pan feeders.
	(b) Under §60.15, the "fixed capital cost of the new components" includes the fixed capital cost of all depreciable components (except components specified in paragraph (a) of this section) that are or will be replaced pursuant to all continuous programs of component replacement commenced within any 2-year period following August 24, 1982.

# **Monitoring of Operations**

#### §60.384

- (a) The owner or operator subject to the provisions of this subpart 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  $\pm 250$  pascals ( $\pm 1$  inch water) gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.
- (b) The owner or operator subject to the provisions of this subpart 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  $\pm 5$  percent of design scrubbing liquid flow rate and must be calibrated on at least an annual basis in accordance with manufacturer's instructions.

# **Recordkeeping and Reporting Requirements**

#### §60.385

- (a) The owner or operator subject to the provisions of this subpart shall conduct a performance test and submit to the Administrator a written report of the results of the test as specified in §60.8(a).
- (b) During the initial performance test of a wet scrubber, and at least weekly thereafter, the owner or operator shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate.
- (c) After the initial performance test of a wet scrubber, the owner or operator shall submit semiannual reports to the Administrator of occurrences when the measurements of the scrubber pressure loss (or gain) or liquid flow rate differ by more than  $\pm 30$  percent from the average obtained during the most recent performance test.
- (d) The reports required under paragraph (c) shall be postmarked within 30 days following the end of the second and fourth calendar quarters.
- (e) The requirements of this subsection remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected sources within the State will be relieved of the obligation to comply with this subsection, provided that they comply with requirements established by the State.

#### **Test Methods and Procedures**

#### §60.386

- (a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).
- (b) The owner or operator shall determine compliance with the particulate matter standards §60.382 as follows:
  - (1) 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.
  - (2) Method 9 and the procedures in §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. A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval. This option is subject to the following limitations:
    - (i) No more than three emission points are read concurrently;
    - (ii) All three emission points must be within a 70° viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points; and
    - (iii) If an opacity reading for any one of the three emission points is within 5 percent opacity of the application standard, then the observer must stop taking readings for the other two points and continue reading just that single point.
- (c) To comply with §60.385(c), the owner or operator shall use the monitoring devices in §60.384(a) and (b) 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.

# FEDERAL REGULATIONS 40 CFR PART 60 SUBPART IIII

# Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Applicable provisions of 40 CFR 60 Subpart IIII shall apply.

11 1	1 11 0
Subject Emission	All equipment listed in the following permits: 1223009 and 1223012
Units Permit	
Number	

# [71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011, 81 FR 44219, July 7, 2016; 86 FR 34358, June 29, 2021]

# **Emission Standards for Emergency Engines**

§60.4205	(d) Owners and operators of emergency stationary CI engines with a displacement of greater than or equal to
	30 liters per cylinder must meet the requirements in this section.
	(1) For engines installed prior to January 1, 2012, limit the emissions of $NO_X$ in the stationary CI internal combustion engine exhaust to the following:
	(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm; (ii) $45 \cdot n^{-0.2}$ g/KW-hr ( $34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and
	(iii) 9.8 g/kW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.
	(2) For engines installed on or after January 1, 2012, limit the emissions of NO <sub>X</sub> in the stationary CI internal combustion engine exhaust to the following:
	<ul> <li>(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;</li> <li>(ii) 44 · n<sup>-0.23</sup> g/KW-hr (33 · n<sup>-0.23</sup> g/HP-hr) when maximum engine speed is greater than or equal to</li> </ul>
	130 but less than 2,000 rpm and where n is maximum engine speed; and
	(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.
	(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).
	(f) Owners and operators of any modified or reconstructed emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed CI ICE that are specified in paragraphs (a) through (e) of this section.

# **Fuel Requirements**

§60.4207	(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).
	(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.  (c) [Reserved]

- (d) Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder are no longer subject to the requirements of paragraph (a) of this section, and must use fuel that meets a maximum per-gallon sulfur content of 1,000 parts per million (ppm).
- (e) Stationary CI ICE that have a national security exemption under §60.4200(d) are also exempt from the fuel requirements in this section.

# **Compliance Requirements**

#### **§60.4210**

- (a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:
  - (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
  - (2) Change only those emission-related settings that are permitted by the manufacturer; and
  - (3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.
- (c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in \$60.4204(b) or \$60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in \$60.4205(c), you must comply by purchasing an engine certified to the emission standards in \$60.4204(b), or \$60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.
- (f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
  - (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
  - (2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

- (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- (ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
- (iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
- (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
- (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
  - (ii) [Reserved]
- (g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

- (2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.
- (3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

# Test Methods for Stationary CI Engine Less than 30 liters/Cylinder

#### **§60.4212**

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this section.

- (a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.
- (b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.
- (c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

NTE requirement for each pollutant =  $(1.25) \times (STD)$  (Eq. 1)

Where

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in \$60.4204(a), \$60.4205(a), or \$60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in \$60.4204(a),

§60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in 60.4204(a), 60.4205(a), or 60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in \$60.4204(a), \$60.4205(a), or \$60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in \$60.4204(a), \$60.4205(a), or \$60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in  $\S60.4204(a)$ ,  $\S60.4205(a)$ , or  $\S60.4205(c)$ .

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

# Notification, Reporting, and Recordkeeping Requirements

#### **§60.4214**

- (a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.
- (1) Submit an initial notification as required in  $\S60.7(a)(1)$ . The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.
  - (i) Name and address of the owner or operator;
  - (ii) The address of the affected source;
- (iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

- (iv) Emission control equipment; and
- (v) Fuel used.
- (2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.
- (i) All notifications submitted to comply with this subpart and all documentation supporting any notification.
  - (ii) Maintenance conducted on the engine.
- (iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.
- (iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.
- (b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.
- (c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.
- (d) If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in  $\S60.4211(f)(2)(ii)$  and (iii) or that operates for the purposes specified in  $\S60.4211(f)(3)(i)$ , you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.
  - (1) The report must contain the following information:
  - (i) Company name and address where the engine is located.
  - (ii) Date of the report and beginning and ending dates of the reporting period.
  - (iii) Engine site rating and model year.
  - (iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
- (v) Hours operated for the purposes specified in §60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(2)(ii) and (iii).
- (vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §60.4211(f)(2)(ii) and (iii).
- (vii) Hours spent for operation for the purposes specified in §60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

- (2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
   (3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data
  - (3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4.

# **General Provisions**

§60.4218	Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.						
§60.4219	Table 1 to Subpart IIII of Part 60—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder  [As stated in §§60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]						
displac		displacement of <10	Emission standards for stationary pre-2007 model year engines with a splacement of <10 liters per cylinder and 2007-2010 model year engines ,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)				
		NMHC + NO <sub>X</sub>	HC	NOx	СО	PM	
	KW<8 (HP<11)	10.5 (7.8)			8.0 (6.0)	1.0 (0.7	
	8≤KW<19 (11≤HP<25)	9.5 (7.1)			6.6 (4.9)	0.80 (0.6	
	19≤KW<37 (25≤HP<50)	9.5 (7.1)			5.5 (4.1)	0.80 (0.6	
	37≤KW<56 (50≤HP<75)			9.2 (6.9)			
	56≤KW<75 (75≤HP<100)			9.2 (6.9)			
	75≤KW<130 (100≤HP<175)			9.2 (6.9)			
	130≤KW<225 (175≤HP<300)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.4	
	225≤KW<450 (300≤HP<600)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.4	
	450≤KW≤560 (600≤HP≤750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.4	
	KW>560 (HP>750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.4	

Table 2 to Subpart IIII of Part 60—Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder

[As stated in §60.4202(a)(1), you must comply with the following emission standards]

Engine power	Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)					
	Model year(s)	NO <sub>X</sub> + NMHC	CO	PM		
KW<8 (HP<11)	2008+	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)		
8≤KW<19 (11≤HP<25)	2008+	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)		
19≤KW<37 (25≤HP<50)	2008+	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)		

# Table 5 to Subpart IIII of Part 60—Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

[You must comply with the labeling requirements in §60.4210(f) and the recordkeeping requirements in §60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

Engine power	Starting model year
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

# Table 8 to Subpart IIII of Part 60—Applicability of General Provisions to Subpart IIII

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4219.
§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	
§60.7	Notification and Recordkeeping		Except that §60.7 only applies as specified in §60.4214(a).

§60.8	Performance tests	Yes	Except that §60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified.
§60.9	Availability of information	Yes	
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart IIII.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	Yes	Except that §60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	
§60.19	General notification and reporting requirements	Yes	

# FEDERAL REGULATIONS 40 CFR 61 SUBPART M

# **National Emission Standard for Asbestos**

Applicable provisions of 40 CFR 61 Subpart M shall apply.

[55 FR 48414, Nov. 20, 1990]

# **Applicability**

§61.140	The provisions of this subpart are applicable to those sources specified in §§61.142 through 61.151, 61.154, and 61.155.

# **Standard for Roadways**

§61.143	No person may construct or maintain a roadway with asbestos tailings or asbestos-containing waste material on that roadway, unless, for asbestos tailings.			
	(a) It is a temporary roadway on an area of asbestos ore deposits (asbestos mine): or			
	(b) It is a temporary roadway at an active asbestos mill site and is encapsulated with a resinous or bituminous binder. The encapsulated road surface must be maintained at a minimum frequency of once per year to prevent dust emissions; or			
	(c) It is encapsulated in asphalt concrete meeting the specifications contained in section 401 of Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-85, 1985, or their equivalent.			

# **Standard for Demolition and Renovation**

§61.145(a)	(a)To determine which requirements of paragraphs (a), (b), and (c) of this section apply to the owner or operator of a demolition or renovation activity and prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable ACM. The requirements of paragraphs (b) and (c) of this section apply to each owner or operator of a demolition or renovation activity, including the removal of RACM as follows:
§61.145(a)(1)	(1) In a facility being demolished, all the requirements of paragraphs (b) and (c) of this section apply, except as provided in paragraph (a)(3) of this section, if the combined amount of RACM is  (i) At least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or  (ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously.

# §61.145(a)(2)

- (2) In a facility being demolished, only the notification requirements of paragraphs (b)(1), (2), (3)(i) and (iv), and (4)(i) through (vii) and (4)(ix) and (xvi) of this section apply, if the combined amount of RACM is
- (i) Less than 80 linear meters (260 linear feet) on pipes and less than 15 square meters (160 square feet) on other facility components, and
- (ii) Less than one cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously or there is no asbestos.
- (3) If the facility is being demolished under an order of a State or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse, only the requirements of paragraphs (b)(1), (b)(2), (b)(3)(iii), (b)(4) (except (b)(4)(viii)), (b)(5), and (c)(4) through (c)(9) of this section apply.
- (4) In a facility being renovated, including any individual nonscheduled renovation operation, all the requirements of paragraphs (b) and (c) of this section apply if the combined amount of RACM to be stripped, removed, dislodged, cut, drilled, or similarly disturbed is
- (i) At least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or
- (ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously.
- (iii) To determine whether paragraph (a)(4) of this section applies to planned renovation operations involving individual nonscheduled operations, predict the combined additive amount of RACM to be removed or stripped during a calendar year of January 1 through December 31.
- (iv) To determine whether paragraph (a)(4) of this section applies to emergency renovation operations, estimate the combined amount of RACM to be removed or stripped as a result of the sudden, unexpected event that necessitated the renovation.
- (5) Owners or operators of demolition and renovation operations are exempt from the requirements of §§61.05(a), 61.07, and 61.09.

# §61.145(b)

#### **Notification Requirements**

- (b)Each owner or operator of a demolition or renovation activity to which this section applies shall:
- (1) Provide the Administrator with written notice of intention to demolish or renovate. Delivery of the notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.
- (2) Update notice, as necessary, including when the amount of asbestos affected changes by at least 20 percent.
  - (3) Postmark or deliver the notice as follows:
- (i) At least 10 working days before asbestos stripping or removal work or any other activity begins (such as site preparation that would break up, dislodge or similarly disturb asbestos material), if the operation is described in paragraphs (a) (1) and (4) (except (a)(4)(iii) and (a)(4)(iv)) of this section. If the operation is as described in paragraph (a)(2) of this section, notification is required 10 working days before demolition begins.

# §61.145(b)

- (ii) At least 10 working days before the end of the calendar year preceding the year for which notice is being given for renovations described in paragraph (a)(4)(iii) of this section.
- (iii) As early as possible before, but not later than, the following working day if the operation is a demolition ordered according to paragraph (a)(3) of this section or, if the operation is a renovation described in paragraph (a)(4)(iv) of this section.
- (iv) For asbestos stripping or removal work in a demolition or renovation operation, described in paragraphs (a) (1) and (4) (except (a)(4)(iii) and (a)(4)(iv)) of this section, and for a demolition described in paragraph (a)(2) of this section, that will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator as follows:
- (A) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin after the date contained in the notice,
- (I) Notify the Administrator of the new start date by telephone as soon as possible before the original start date, and
- (2) Provide the Administrator with a written notice of the new start date as soon as possible before, and no later than, the original start date. Delivery of the updated notice by the U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.
- (B) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin on a date earlier than the original start date,
- (1) Provide the Administrator with a written notice of the new start date at least 10 working days before asbestos stripping or removal work begins.
- (2) For demolitions covered by paragraph (a)(2) of this section, provide the Administrator written notice of a new start date at least 10 working days before commencement of demolition. Delivery of updated notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.
- (C) In no event shall an operation covered by this paragraph begin on a date other than the date contained in the written notice of the new start date.
  - (4) Include the following in the notice:
  - (i) An indication of whether the notice is the original or a revised notification.
- (ii) Name, address, and telephone number of both the facility owner and operator and the asbestos removal contractor owner or operator.
  - (iii) Type of operation: demolition or renovation.
- (iv) Description of the facility or affected part of the facility including the size (square meters [square feet] and number of floors), age, and present and prior use of the facility.
- (v) Procedure, including analytical methods, employed to detect the presence of RACM and Category I and Category II nonfriable ACM.

# §61.145(b)

- (vi) Estimate of the approximate amount of RACM to be removed from the facility in terms of length of pipe in linear meters (linear feet), surface area in square meters (square feet) on other facility components, or volume in cubic meters (cubic feet) if off the facility components. Also, estimate the approximate amount of Category I and Category II nonfriable ACM in the affected part of the facility that will not be removed before demolition.
- (vii) Location and street address (including building number or name and floor or room number, if appropriate), city, county, and state, of the facility being demolished or renovated.
- (viii) Scheduled starting and completion dates of asbestos removal work (or any other activity, such as site preparation that would break up, dislodge, or similarly disturb asbestos material) in a demolition or renovation; planned renovation operations involving individual nonscheduled operations shall only include the beginning and ending dates of the report period as described in paragraph (a)(4)(iii) of this section.
  - (ix) Scheduled starting and completion dates of demolition or renovation.
- (x) Description of planned demolition or renovation work to be performed and method(s) to be employed, including demolition or renovation techniques to be used and description of affected facility components.
- (xi) Description of work practices and engineering controls to be used to comply with the requirements of this subpart, including asbestos removal and waste-handling emission control procedures.
- (xii) Name and location of the waste disposal site where the asbestos-containing waste material will be deposited.
- (xiii) A certification that at least one person trained as required by paragraph (c)(8) of this section will supervise the stripping and removal described by this notification. This requirement shall become effective 1 year after promulgation of this regulation.
- (xiv) For facilities described in paragraph (a)(3) of this section, the name, title, and authority of the State or local government representative who has ordered the demolition, the date that the order was issued, and the date on which the demolition was ordered to begin. A copy of the order shall be attached to the notification.
- (xv) For emergency renovations described in paragraph (a)(4)(iv) of this section, the date and hour that the emergency occurred, a description of the sudden, unexpected event, and an explanation of how the event caused an unsafe condition, or would cause equipment damage or an unreasonable financial burden.
- (xvi) Description of procedures to be followed in the event that unexpected RACM is found or Category II nonfriable ACM becomes crumbled, pulverized, or reduced to powder.
  - (xvii) Name, address, and telephone number of the waste transporter.
- (5) The information required in paragraph (b)(4) of this section must be reported using a form similar to that shown in Figure 3.

# §61.145(c)

#### **Procedures for Asbestos Emission Control.**

- (c)Each owner or operator of a demolition or renovation activity to whom this paragraph applies, according to paragraph (a) of this section, shall comply with the following procedures:
- (1) Remove all RACM from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. RACM need not be removed before demolition if:
  - (i) It is Category I nonfriable ACM that is not in poor condition and is not friable.
- (ii) It is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition; or
- (iii) It was not accessible for testing and was, therefore, not discovered until after demolition began and, as a result of the demolition, the material cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos-contaminated debris must be treated as asbestos-containing waste material and adequately wet at all times until disposed of.
- (iv) They are Category II nonfriable ACM and the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition.
- (2) When a facility component that contains, is covered with, or is coated with RACM is being taken out of the facility as a unit or in sections:
  - (i) Adequately wet all RACM exposed during cutting or disjoining operations; and
- (ii) Carefully lower each unit or section to the floor and to ground level, not dropping, throwing, sliding, or otherwise damaging or disturbing the RACM.
- (3) When RACM is stripped from a facility component while it remains in place in the facility, adequately wet the RACM during the stripping operation.
  - (i) In renovation operations, wetting is not required if:
- (A) The owner or operator has obtained prior written approval from the Administrator based on a written application that wetting to comply with this paragraph would unavoidably damage equipment or present a safety hazard; and
  - (B) The owner or operator uses of the following emission control methods:
- (1) A local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping and removal of the asbestos materials. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in §61.152.
- (2) A glove-bag system designed and operated to contain the particulate asbestos material produced by the stripping of the asbestos materials.
  - (3) Leak-tight wrapping to contain all RACM prior to dismantlement.

#### §61.145(c)

- (ii) In renovation operations where wetting would result in equipment damage or a safety hazard, and the methods allowed in paragraph (c)(3)(i) of this section cannot be used, another method may be used after obtaining written approval from the Administrator based upon a determination that it is equivalent to wetting in controlling emissions or to the methods allowed in paragraph (c)(3)(i) of this section.
- (iii) A copy of the Administrator's written approval shall be kept at the worksite and made available for inspection.
- (4) After a facility component covered with, coated with, or containing RACM has been taken out of the facility as a unit or in sections pursuant to paragraph (c)(2) of this section, it shall be stripped or contained in leak-tight wrapping, except as described in paragraph (c)(5) of this section. If stripped, either:
  - (i) Adequately wet the RACM during stripping; or
- (ii) Use a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in §61.152.
- (5) For large facility components such as reactor vessels, large tanks, and steam generators, but not beams (which must be handled in accordance with paragraphs (c)(2), (3), and (4) of this section), the RACM is not required to be stripped if the following requirements are met:
- (i) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM.
  - (ii) The component is encased in a leak-tight wrapping.
- (iii) The leak-tight wrapping is labeled according to  $\S61.149(d)(1)(i)$ , (ii), and (iii) during all loading and unloading operations and during storage.
  - (6) For all RACM, including material that has been removed or stripped:
- (i) Adequately wet the material and ensure that it remains wet until collected and contained or treated in preparation for disposal in accordance with §61.150; and
- (ii) Carefully lower the material to the ground and floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material.
- (iii) Transport the material to the ground via leak-tight chutes or containers if it has been removed or stripped more than 50 feet above ground level and was not removed as units or in sections.
- (iv) RACM contained in leak-tight wrapping that has been removed in accordance with paragraphs (c)(4) and (c)(3)(i)(B)(3) of this section need not be wetted.
  - (7) When the temperature at the point of wetting is below  $0 \,^{\circ}\text{C}$  (32  $^{\circ}\text{F}$ ):
- (i) The owner or operator need not comply with paragraph (c)(2)(i) and the wetting provisions of paragraph (c)(3) of this section.
- (ii) The owner or operator shall remove facility components containing, coated with, or covered with RACM as units or in sections to the maximum extent possible.

#### §61.145(c)

- (iii) During periods when wetting operations are suspended due to freezing temperatures, the owner or operator must record the temperature in the area containing the facility components at the beginning, middle, and end of each workday and keep daily temperature records available for inspection by the Administrator during normal business hours at the demolition or renovation site. The owner or operator shall retain the temperature records for at least 2 years.
- (8) Effective 1 year after promulgation of this regulation, no RACM shall be stripped, removed, or otherwise handled or disturbed at a facility regulated by this section unless at least one on-site representative, such as a foreman or management-level person or other authorized representative, trained in the provisions of this regulation and the means of complying with them, is present. Every 2 years, the trained on-site individual shall receive refresher training in the provisions of this regulation. The required training shall include as a minimum: applicability; notifications; material identification; control procedures for removals including, at least, wetting, local exhaust ventilation, negative pressure enclosures, glove-bag procedures, and High Efficiency Particulate Air (HEPA) filters; waste disposal work practices; reporting and recordkeeping; and asbestos hazards and worker protection. Evidence that the required training has been completed shall be posted and made available for inspection by the Administrator at the demolition or renovation site.
- (9) For facilities described in paragraph (a)(3) of this section, adequately wet the portion of the facility that contains RACM during the wrecking operation.
- (10) If a facility is demolished by intentional burning, all RACM including Category I and Category II nonfriable ACM must be removed in accordance with the NESHAP before burning.

# <u>Standard for Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations</u>

#### §61.150

Each owner or operator of any source covered under the provisions of §§61.144, 61.145, 61.146, and 61.147 shall comply with the following provisions:

- (a) Discharge no visible emissions to the outside air during the collection, processing (including incineration), packaging, or transporting of any asbestos-containing waste material generated by the source, or use one of the emission control and waste treatment methods specified in paragraphs (a) (1) through (4) of this section.
  - (1) Adequately wet asbestos-containing waste material as follows:
- (i) Mix control device asbestos waste to form a slurry; adequately wet other asbestos-containing waste material; and
- (ii) Discharge no visible emissions to the outside air from collection, mixing, wetting, and handling operations, or use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air; and
- (iii) After wetting, seal all asbestos-containing waste material in leak-tight containers while wet; or, for materials that will not fit into containers without additional breaking, put materials into leak-tight wrapping; and

#### **§61.150**

- (iv) Label the containers or wrapped materials specified in paragraph (a)(1)(iii) of this section using warning labels specified by Occupational Safety and Health Standards of the Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.1001(j)(4) or 1926.1101(k)(8). The labels shall be printed in letters of sufficient size and contrast so as to be readily visible and legible.
- (v) For asbestos-containing waste material to be transported off the facility site, label containers or wrapped materials with the name of the waste generator and the location at which the waste was generated.
  - (2) Process asbestos-containing waste material into nonfriable forms as follows:
  - (i) Form all asbestos-containing waste material into nonfriable pellets or other shapes;
- (ii) Discharge no visible emissions to the outside air from collection and processing operations, including incineration, or use the method specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.
- (3) For facilities demolished where the RACM is not removed prior to demolition according to §§61.145(c)(1) (i), (ii), (iii), and (iv) or for facilities demolished according to §61.145(c)(9), adequately wet asbestos-containing waste material at all times after demolition and keep wet during handling and loading for transport to a disposal site. Asbestos-containing waste materials covered by this paragraph do not have to be sealed in leak-tight containers or wrapping but may be transported and disposed of in bulk.
- (4) Use an alternative emission control and waste treatment method that has received prior approval by the Administrator according to the procedure described in §61.149(c)(2).
- (5) As applied to demolition and renovation, the requirements of paragraph (a) of this section do not apply to Category I nonfriable ACM waste and Category II nonfriable ACM waste that did not become crumbled, pulverized, or reduced to powder.
- (b) All asbestos-containing waste material shall be deposited as soon as is practical by the waste generator at:
  - (1) A waste disposal site operated in accordance with the provisions of §61.154, or
- (2) An EPA-approved site that converts RACM and asbestos-containing waste material into nonasbestos (asbestos-free) material according to the provisions of §61.155.
- (3) The requirements of paragraph (b) of this section do not apply to Category I nonfriable ACM that is not RACM.
- (c) Mark vehicles used to transport asbestos-containing waste material during the loading and unloading of waste so that the signs are visible. The markings must conform to the requirements of §§61.149(d)(1) (i), (ii), and (iii).
  - (d) For all asbestos-containing waste material transported off the facility site:
- (1) Maintain waste shipment records, using a form similar to that shown in Figure 4, and include the following information:
  - (i) The name, address, and telephone number of the waste generator.

#### **§61.150**

- (ii) The name and address of the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program.
  - (iii) The approximate quantity in cubic meters (cubic yards).
  - (iv) The name and telephone number of the disposal site operator.
  - (v) The name and physical site location of the disposal site.
  - (vi) The date transported.
  - (vii) The name, address, and telephone number of the transporter(s).
- (viii) A certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.
- (2) Provide a copy of the waste shipment record, described in paragraph (d)(1) of this section, to the disposal site owners or operators at the same time as the asbestos-containing waste material is delivered to the disposal site.
- (3) For waste shipments where a copy of the waste shipment record, signed by the owner or operator of the designated disposal site, is not received by the waste generator within 35 days of the date the waste was accepted by the initial transporter, contact the transporter and/or the owner or operator of the designated disposal site to determine the status of the waste shipment.
- (4) Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator if a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the waste generator within 45 days of the date the waste was accepted by the initial transporter. Include in the report the following information:
  - (i) A copy of the waste shipment record for which a confirmation of delivery was not received, and
- (ii) A cover letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts.
- (5) Retain a copy of all waste shipment records, including a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site, for at least 2 years.
- (e) Furnish upon request, and make available for inspection by the Administrator, all records required under this section.

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#### **Air Cleaning**

#### **§61.152**

- (a) The owner or operator who uses air cleaning, as specified in  $\S\S61.142(a)$ , 61.144(b)(2), 61.145(c)(3)(i)(B)(1), 61.145(c)(4)(ii), 61.145(c)(11)(i), 61.146(b)(2), 61.147(b)(2), 61.149(b), 61.149(c)(1)(ii), 61.150(a)(1)(ii), 61.150(a)(2)(ii), and 61.155(e) shall:
- (1) Use fabric filter collection devices, except as noted in paragraph (b) of this section, doing all of the following:
- (i) Ensuring that the airflow permeability, as determined by ASTM Method D737-75, does not exceed 9  $\rm m^3/min/m^2$  (30  $\rm ft^3/min/ft^2$ ) for woven fabrics or  $\rm 11^3/min/m^2$ (35  $\rm ft^3/min/ft^2$ ) for felted fabrics, except that  $\rm 12~m^3/min/m^2$  (40  $\rm ft^3min/ft^2$ ) for woven and  $\rm 14~m^3/min/m^2$  (45  $\rm ft^3min/ft^2$ ) for felted fabrics is allowed for filtering air from asbestos ore dryers; and
- (ii) Ensuring that felted fabric weighs at least 475 grams per square meter (14 ounces per square yard) and is at least 1.6 millimeters (one-sixteenth inch) thick throughout; and
  - (iii) Avoiding the use of synthetic fabrics that contain fill yarn other than that which is spun.
- (2) Properly install, use, operate, and maintain all air-cleaning equipment authorized by this section. Bypass devices may be used only during upset or emergency conditions and then only for so long as it takes to shut down the operation generating the particulate asbestos material.
- (3) For fabric filter collection devices installed after January 10, 1989, provide for easy inspection for faulty bags.
  - (b) There are the following exceptions to paragraph (a)(1):
- (1) After January 10, 1989, if the use of fabric creates a fire or explosion hazard, or the Administrator determines that a fabric filter is not feasible, the Administrator may authorize as a substitute the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals (40 inches water gage pressure).
  - (2) Use a HEPA filter that is certified to be at least 99.97 percent efficient for 0.3 micron particles.
- (3) The Administrator may authorize the use of filtering equipment other than described in paragraphs (a)(1) and (b)(1) and (2) of this section if the owner or operator demonstrates to the Administrator's satisfaction that it is equivalent to the described equipment in filtering particulate asbestos material.

#### Reporting

#### §61.153

(a) Any new source to which this subpart applies (with the exception of sources subject to §§61.143, 61.145, 61.146, and 61.148), which has an initial startup date preceding the effective date of this revision, shall provide the following information to the Administrator postmarked or delivered within 90 days of the effective date. In the case of a new source that does not have an initial startup date preceding the effective date, the information shall be provided, postmarked or delivered, within 90 days of the initial startup date. Any owner or operator of an existing source shall provide the following information to the Administrator within 90 days of the effective date of this subpart unless the owner or operator of the existing source has previously provided this information to the Administrator. Any changes in the information provided by any existing source shall be provided to the Administrator, postmarked or delivered, within 30 days after the change.

#### §61.153

- (1) A description of the emission control equipment used for each process; and
- (i) If the fabric device uses a woven fabric, the airflow permeability in m<sup>3</sup>/min/m<sup>2</sup> and; if the fabric is synthetic, whether the fill yarn is spun or not spun; and
- (ii) If the fabric filter device uses a felted fabric, the density in  $g/m^2$ , the minimum thickness in inches, and the airflow permeability in  $m^3/min/m^2$ .
  - (2) If a fabric filter device is used to control emissions,
- (i) The airflow permeability in m³/min/m² (ft³/min/ft²) if the fabric filter device uses a woven fabric, and, if the fabric is synthetic, whether the fill yarn is spun or not spun; and
- (ii) If the fabric filter device uses a felted fabric, the density in  $g/m^2$  (oz/yd<sup>2</sup>), the minimum thickness in millimeters (inches), and the airflow permeability in  $m^3/min/m^2$  (ft<sup>3</sup>/min/ft<sup>2</sup>).
  - (3) If a HEPA filter is used to control emissions, the certified efficiency.
  - (4) For sources subject to §§61.149 and 61.150:
  - (i) A brief description of each process that generates asbestos-containing waste material; and
- (ii) The average volume of asbestos-containing waste material disposed of, measured in m³/day (yd³/day); and
  - (iii) The emission control methods used in all stages of waste disposal; and
- (iv) The type of disposal site or incineration site used for ultimate disposal, the name of the site operator, and the name and location of the disposal site.
  - (5) For sources subject to §§61.151 and 61.154:
  - (i) A brief description of the site; and
  - (ii) The method or methods used to comply with the standard, or alternative procedures to be used.
- (b) The information required by paragraph (a) of this section must accompany the information required by §61.10. Active waste disposal sites subject to §61.154 shall also comply with this provision. Roadways, demolition and renovation, spraying, and insulating materials are exempted from the requirements of §61.10(a). The information described in this section must be reported using the format of appendix A of this part as a guide.

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# FEDERAL REGULATIONS 40 CFR 63 SUBPART A General Provisions

Applicable provisions of 40 CFR 63 Subpart A shall apply.

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16595, Apr. 5, 2002; 85 FR 73885, Nov. 19, 2020]

### **Applicability**

8(2.1( )	Comment (1) Towns and the most and defined in 862.2 and the Class Advis Act (Act)
§63.1(a)	General. (1) Terms used throughout this part are defined in §63.2 or in the Clean Air Act (Act) as amended in 1990, except that individual subparts of this part may include specific definitions in addition to or that supersede definitions in §63.2.
	(2) This part contains national emission standards for hazardous air pollutants (NESHAP) established pursuant to section 112 of the Act as amended November 15, 1990. These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants listed in this part pursuant to section 112(b) of the Act. This section explains the applicability of such standards to sources affected by them. The standards in this part are independent of NESHAP contained in 40 CFR part 61. The NESHAP in part 61 promulgated by signature of the Administrator before November 15, 1990 (i.e., the date of enactment of the Clean Air Act Amendments of 1990) remain in effect until they are amended, if appropriate, and added to this part.
	(3) No emission standard or other requirement established under this part shall be interpreted, construed, or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established by the Administrator pursuant to other authority of the Act (section 111, part C or D or any other authority of this Act), or a standard issued under State authority. The Administrator may specify in a specific standard under this part that facilities subject to other provisions under the Act need only comply with the provisions of that standard.
	(4)(i) Each relevant standard in this part 63 must identify explicitly whether each provision in this subpart A is or is not included in such relevant standard.
	(ii) If a relevant part 63 standard incorporates the requirements of 40 CFR part 60, part 61 or other part 63 standards, the relevant part 63 standard must identify explicitly the applicability of each corresponding part 60, part 61, or other part 63 subpart A (General) provision.
	(iii) The General Provisions in this subpart A do not apply to regulations developed pursuant to section 112(r) of the amended Act, unless otherwise specified in those regulations.
	(5) [Reserved]
	(6) To obtain the most current list of categories of sources to be regulated under section 112 of the Act, or to obtain the most recent regulation promulgation schedule established pursuant to section 112(e) of the Act, contact the Office of the Director, Emission Standards Division, Office of Air Quality Planning and Standards, U.S. EPA (MD-13), Research Triangle Park, North Carolina 27711.
	(7)-(9) [Reserved]

# (10) For the purposes of this part, time periods specified in days shall be measured in calendar days, §63.1(a) even if the word "calendar" is absent, unless otherwise specified in an applicable requirement. (11) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, test plan, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery agreed to by the permitting authority, is acceptable. (12) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in §63.9(i). (b) Initial applicability determination for this part. (1) The provisions of this part apply to the owner or §63.1(b) operator of any stationary source that-(i) Emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and (ii) Is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to this part. (2) [Reserved] (3) An owner or operator of a stationary source who is in the relevant source category and who determines that the source is not subject to a relevant standard or other requirement established under this part must keep a record as specified in §63.10(b)(3). (c) Applicability of this part after a relevant standard has been set under this part. (1) If a relevant §63.1(c) standard has been established under this part, the owner or operator of an affected source must comply with the provisions of that standard and of this subpart as provided in paragraph (a)(4) of this section. (2) Except as provided in §63.10(b)(3), if a relevant standard has been established under this part, the owner or operator of an affected source may be required to obtain a title V permit from a permitting authority in the State in which the source is located. Emission standards promulgated in this part for area sources pursuant to section 112(c)(3) of the Act will specify whether— (i) States will have the option to exclude area sources affected by that standard from the requirement to obtain a title V permit (i.e., the standard will exempt the category of area sources altogether from the permitting requirement); (ii) States will have the option to defer permitting of area sources in that category until the Administrator takes rulemaking action to determine applicability of the permitting requirements; or

§63.1(c)	(iii) If a standard fails to specify what the permitting requirements will be for area sources affected by such a standard, then area sources that are subject to the standard will be subject to the requirement to obtain a title V permit without any deferral.  (3)-(4) [Reserved]  (5) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source also shall be subject to the notification requirements of this subpart.
§63.1(e)	(e) If the Administrator promulgates an emission standard under section 112(d) or (h) of the Act that is applicable to a source subject to an emission limitation by permit established under section 112(j) of the Act, and the requirements under the section 112(j) emission limitation are substantially as effective as the promulgated emission standard, the owner or operator may request the permitting authority to revise the source's title V permit to reflect that the emission limitation in the permit satisfies the requirements of the promulgated emission standard. The process by which the permitting authority determines whether the section 112(j) emission limitation is substantially as effective as the promulgated emission standard must include, consistent with part 70 or 71 of this chapter, the opportunity for full public, EPA, and affected State review (including the opportunity for EPA's objection) prior to the permit revision being finalized. A negative determination by the permitting authority constitutes final action for purposes of review and appeal under the applicable title V operating permit program.

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## FEDERAL REGULATIONS 40 CFR 63 SUBPART ZZZZ

# National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

### Applicable provisions of 40 CFR 63 Subpart ZZZZ shall apply.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010; 75 FR 51588, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013; 87 FR 48607, Aug. 10, 2022]

	Subject	All equipment listed in the following permits: 1223009 and 1223012
	<b>Emission Units</b>	
	Permit Number	
•		

§63.6590	(c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.	
	(1) A new or reconstructed stationary RICE located at an area source;	

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## FEDERAL REGULATIONS NESHAP SUBPART EEEEEEE

# National Emissions Standards for Hazardous Air Pollutants for Gold Mine Ore Processing and Production

Applicable provisions of 40 CFR Part 63 Subpart EEEEEEE shall apply.

### [76 FR 9480, Feb. 17, 2011]

Subject Emission	All equipment listed in the following permits: 1223007
Units Permit	
Number	

### **Applicability**

§63.11640	(a) You are subject to this subpart if you own or operate a gold mine ore processing and production facility as defined in §63.11651, that is an area source.
	(b) This subpart applies to each new or existing affected source. The affected sources are each collection of "ore pretreatment processes" at a gold mine ore processing and production facility, each collection of "carbon processes with mercury retorts" at a gold mine ore processing and production facility, each collection of "carbon processes without mercury retorts" at a gold mine ore processing and production facility, and each collection of "non-carbon concentrate processes" at a gold mine ore processing and production facility, as defined in §63.11651.
	(1) An affected source is existing if you commenced construction or reconstruction of the affected source on or before April 28, 2010.
	(2) An affected source is new if you commenced construction or reconstruction of the affected source after April 28, 2010.
	(c) This subpart does not apply to research and development facilities, as defined in section 112(c)(7) of the Clean Air Act (CAA).
	(d) If you own or operate a source subject to this subpart, you must have or you must obtain a permit under 40 CFR part 70 or 40 CFR part 71.

### **Compliance Dates**

§63.11641	(b) If you own or operate a new affected source, and the initial startup of your affected source is on or before February 17, 2011, you must comply with the provisions of this subpart no later than February 17, 2011.
	(c) If you own or operate a new affected source, and the initial startup of your affected source is after February 17, 2011, you must comply with the provisions of this subpart upon startup of your affected source.

# **Standards and Compliance Requirements**

§63.11645	(h) For new non-carbon concentrate processes, you must emit no more than 0.1 pounds of mercury per ton of concentrate processed.
§63.11646(a)	(a)Except as provided in paragraph (b) of this section, you must conduct a mercury compliance emission test within 180 days of the compliance date for all process units at new and existing affected sources according to the requirements in paragraphs (a)(1) through (a)(13) of this section. This compliance testing must be repeated annually thereafter, with no two consecutive annual compliance tests occurring less than 3 months apart or more than 15 months apart.
	(1) You must determine the concentration of mercury and the volumetric flow rate of the stack gas according to the following test methods and procedures:
<ul> <li>(i) Method 1 or 1A (40 CFR part 60, appendix A-1) to select sampling port locations a number of traverse points in each stack or duct. Sampling sites must be located at the control device (or at the outlet of the emissions source if no control device is present) any releases to the atmosphere.</li> <li>(ii) Method 2, 2A, 2C, 2D, 2F (40 CFR part 60, appendix A-1), or Method 2G (40 CF appendix A-2) to determine the volumetric flow rate of the stack gas.</li> </ul>	
(iv) Method 4 (40 CFR part 60, appendix A-3) to determine the moisture content of the	
	(v) Method 29 (40 CFR part 60, appendix A-8) to determine the concentration of mercury, except as provided in paragraphs (a)(1)(vi) and (vii) of this section.
	(vi) Upon approval by the permitting authority, ASTM D6784; "Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method)" (incorporated by reference—see §63.14) may be used as an alternative to Method 29 to determine the concentration of mercury.
	(vii) Upon approval by the permitting authority, Method 30B (40 CFR part 60, appendix A-8) may be used as an alternative to Method 29 to determine the concentration of mercury for those process units with relatively low particulate-bound mercury as specified in Section 1.2 of Method 30B.

#### §63.11646(a)

- (2) A minimum of three test runs must be conducted for each performance test of each process unit. Each test run conducted with Method 29 must collect a minimum sample volume of 0.85 dry standard cubic meters (30 dry standard cubic feet). If conducted with Method 30B or ASTM D6784, determine sample time and volume according to the testing criteria set forth in the relevant method. If the emission testing results for any of the emission points yields a non-detect value, then the minimum detection limit (MDL) must be used to calculate the mass emissions rate (lb/hr) used to calculate the emissions factor (lb/ton) for that emission point and, in turn, for calculating the sum of the emissions (in units of pounds of mercury per ton of concentrate, or pounds of mercury per million tons of ore) for all emission points subject to the emission standard for determining compliance. If the resulting mercury emissions are greater than the MACT emission standard, the owner or operator may use procedures that produce lower MDL results and repeat the mercury emissions testing one additional time for any emission point for which the measured result was below the MDL. If this additional testing is performed, the results from that testing must be used to determine compliance (*i.e.*, there are no additional opportunities allowed to lower the MDL).
- (3) Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. Performance tests must be conducted under operating conditions (including process or production throughputs) that are based on representative performance. Record and report to the permit authority the process throughput for each test run. For sources with multiple emission units (e.g., two roasters, or a furnace, electrowinning circuit and a mercury retort) ducted to a common control device and stack, compliance testing must be performed either by conducting a single compliance test with all affected emissions units in operation or by conducting a separate compliance test on each emissions unit. Alternatively, the owner or operator may request approval from the permit authority for an alternative testing approach. If the units are tested separately, any emissions unit that is not tested initially must be tested as soon as is practicable. If the performance test is conducted when all affected units are operating, then the number of hours of operation used for calculating emissions pursuant to paragraphs (a)(6) and (7) of this section must be the total number of hours for the unit that has the greatest total operating hours for that period of time, or based on an appropriate alternative method approved by the permit authority to account for the hours of operation for each separate unit in these calculations.
- (4) Calculate the mercury emission rate (lb/hr), based on the average of 3 test run values, for each process unit (or combination of units that are ducted to a common stack and are tested when all affected sources are operating pursuant to paragraph (a)(3) of this section) using Equation (1) of this section:

$$E = Cs * Qs * K$$
 (Eq. 1)

Where:

E = mercury emissions in lb/hr;

Cs = concentration of mercury in the stack gas, in grains per dry standard cubic foot (gr/dscf);

Qs = volumetric flow rate of the stack gas, in dry standard cubic feet per hour; and

K = conversion factor for grains (gr) to pounds (lb),  $1.43 \times 10^{-4}$ .

(5) Monitor and record the number of one-hour periods each process unit operates during each month.

#### §63.11646(a)

- (6) For the initial compliance determination for both new and existing sources, determine the total mercury emissions for all the full calendar months between the compliance date and the date of the initial compliance test by multiplying the emission rate in lb/hr for each process unit (or combination of units ducted to a common stack that are tested together) by the number of one-hour periods each process unit (or the unit that had the greatest total operating hours among the combination of multiple units with one stack that are tested together, or an alternative method approved by the permit authority, pursuant to paragraph (a)(3) of this section) operated during those full calendar months prior to the initial compliance test. This initial period must include at least 1 full month of operations. After the initial compliance test, for subsequent compliance tests, determine the mercury mass emissions for the 12 full calendar months prior to the compliance test in accordance with the procedures in paragraph (a)(7) of this section. Existing sources may use a previous emission test for their initial compliance determination in lieu of conducting a new test if the test was conducted within one year of the compliance date using the methods specified in paragraphs (a)(1) through (a)(4) of this section, and the tests were representative of current operating processes and conditions. If a previous test is used for their initial compliance determination, 3 to 12 full months of data on hours of operation and production (i.e., million tons of ore or tons of concentrate), including the month the test was conducted, must be used to calculate the emissions rate (in units of pounds of mercury per million tons of ore for the ore pretreatment affected sources, or in units of pounds of mercury per tons of concentrate for the other affected sources).
- (7) For compliance determinations following the initial compliance test for new and existing sources, determine the total mercury mass emissions for each process unit for the 12 full calendar months preceding the performance test by multiplying the emission rate in lb/hr for each process unit (or combination of units ducted to a common stack that are tested together) by the number of one-hour periods each process unit (or the unit that had the greatest total operating hours among the combination of multiple units with one stack that are tested together, or an alternative method approved by the permit authority, pursuant to paragraph (a)(3) of this section) operated during the 12 full calendar months preceding the completion of the performance tests.
- (9) Measure the weight of concentrate (produced by electrowinning, Merrill Crowe process, gravity feed, or other methods) using weigh scales for each batch prior to processing in mercury retorts or melt furnaces. For facilities with mercury retorts, the concentrate must be weighed in the same state and condition as it is when fed to the mercury retort. For facilities without mercury retorts, the concentrate must be weighed prior to being fed to the melt furnace before drying in any ovens. For facilities that ship concentrate offsite, measure the weight of concentrate as shipped offsite. You must keep accurate records of the weights of each batch of concentrate processed and calculate, and record the total weight of concentrate processed each month.
- (10) You must maintain the systems for measuring density, volumetric flow rate, and weight within  $\pm 5$  percent accuracy. You must describe the specific equipment used to make measurements at your facility and how that equipment is periodically calibrated. You must also explain, document, and maintain written procedures for determining the accuracy of the measurements and make these written procedures available to your permitting authority upon request. You must determine, record, and maintain a record of the accuracy of the measuring systems before the beginning of your initial compliance test and during each subsequent quarter of affected source operation.
- (11) Record the weight in tons of ore for ore pretreatment processes and concentrate for carbon processes with mercury retorts, carbon processes without mercury retorts, and for non-carbon concentrate processes on a daily and monthly basis.

### (12) Calculate the emissions from each new and existing affected source for the sum of all full months §63.11646(a) between the compliance date and the date of the initial compliance test in pounds of mercury per ton of process input using the procedures in paragraphs (a)(12)(i) through (a)(12)(iv) of this section to determine initial compliance with the emission standards in §63.11645. This must include at least 1 full month of data. Or, if a previous test is used pursuant to paragraph (a)(6) of this section for the initial compliance test, use a period of time pursuant to paragraph (a)(6) of this section to calculate the emissions for the affected source. After this initial compliance test period, determine annual compliance using the procedures in paragraph (a)(13) of this section for existing sources. (13) After the initial compliance test, calculate the emissions from each new and existing affected source for each 12-month period preceding each subsequent compliance test in pounds of mercury per ton of process input using the procedures in paragraphs (a)(13)(i) through (iv) of this section to determine compliance with the emission standards in §63.11645. At all times, you must operate and maintain any affected source, including associated air pollution §63.11646(b) control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

#### **Monitoring Requirements**

§63.11647	(f) You must monitor each process unit at each new and existing affected source that uses a carbon adsorber to control mercury emissions using the procedures in paragraphs (f)(1) $\underline{\mathbf{or}}$ (f)(2) of this section.
	A carbon adsorber may include a fixed carbon bed, carbon filter packs or modules, carbon columns, and other variations.
	(1) Continuously sample and analyze the exhaust stream from the carbon adsorber for mercury <b>using Method 30B</b> (40 CFR part 60, appendix A-8) for a duration of at least the minimum sampling time specified in Method 30B and up to one week that includes the period of the annual performance test.
	(i) Establish an upper operating limit for the process as determined using the mercury concentration measurements from the sorbent trap (Method 30B) as calculated from Equation (3) of this section.
	$OLC = C_{trap} * (EL/CT)$ (Eq 3)
	Where:
	OLC = mercury concentration operating limit for the carbon adsorber control device on the process as measured using the sorbent trap, (micrograms per cubic meter);
	$C_{\text{trap}}$ = average mercury concentration measured using the sorbent trap during the week that includes the compliance performance test, (micrograms per cubic meter);
	EL = emission standard for the affected sources (lb/ton of concentrate);
	CT = compliance test results for the affected sources (lb/ton of concentrate).
	(ii) Sample and analyze the exhaust stream from the carbon adsorber for mercury at least monthly using Method 30B (40 CFR part 60, appendix A-8). When the mercury concentration reaches 75 percent
1	of the operating limit, begin weekly sampling and analysis. When the mercury concentration reaches 90 percent of the operating limit, replace the carbon in the carbon adsorber within 30 days. If mercury

concentration exceeds the operating limit, change the carbon in the carbon adsorber within 30 days and report the deviation to your permitting authority.

(2) Conduct an initial sampling of the carbon in the carbon bed for mercury 90 days after the replacement of the carbon. A representative sample must be collected from the inlet of the bed and the exit of the bed and analyzed **using SW-846 Method 7471B** (incorporated by reference—see §63.14). The depth to which the sampler is inserted must be recorded. The design capacity is established by calculating the average carbon loading from the inlet and outlet measurements. Sampling and analysis of the carbon bed for mercury must be performed quarterly thereafter. When the carbon loading reaches 50 percent of the design capacity of the carbon, monthly sampling must be performed until 90 percent of the carbon loading capacity is reached. The carbon must be removed and replaced with fresh carbon no later than 30 days after reaching 90 percent of capacity. For carbon designs where there may be multiple carbon columns or beds, a representative sample may be collected from the first and last column or bed instead of the inlet or outlet. If the carbon loading exceeds the design capacity of the carbon, change the carbon within 30 days and report the deviation to your permitting authority.

#### §63.11647

- (g) You must monitor gas stream temperature at the inlet to the carbon adsorber for each process unit (i.e., carbon kiln, melt furnace, etc.) equipped with a carbon adsorber. Establish a maximum value for the inlet temperature either during the annual performance test (required in §63.11646(a)), according to the manufacturer's specifications, or as approved by your permitting authority. If you choose to establish the temperature operating limit during the performance test, establish the temperature operating limit based on either the highest reading during the test or at 10 °F higher than the average temperature measured during the performance test. Monitor the inlet temperature once per shift. If an inlet temperature exceeds the temperature operating limit, you must take corrective actions to get the temperature back within the parameter operating limit within 48 hours. If the exceedance persists, within 144 hours of the exceedance, you must sample and analyze the exhaust stream from the carbon adsorber using Method 30B (40 CFR part 60, appendix A-8) and compare to an operating limit (calculated pursuant to (f)(1)(i) or you must conduct carbon sampling pursuant to (f)(2) of this section. If the concentration measured with Method 30B is below 90 percent of the operating limit or the carbon sampling results are below 90 percent of the carbon loading capacity, you may set a new temperature operating limit 10 °F above the previous operating limit or at an alternative level approved by your permit authority. If the concentration is above 90 percent of the operating limit or above 90 percent of the carbon loading capacity you must change the carbon in the bed within 30 days and report the event to your permitting authority, and reestablish an appropriate maximum temperature limit based on approval of your permit authority.
- (i) You may conduct additional compliance tests according to the procedures in §63.11646 and reestablish the operating limits required in paragraphs (a) through (c) and (f) through (h) of this section at any time. You must submit a request to your permitting authority for approval to re-establish the operating limits. In the request, you must demonstrate that the proposed change to the operating limit detects changes in levels of mercury emission control. An approved change to the operating limit under this paragraph only applies until a new operating limit is established during the next annual compliance test.

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#### Notification, Reporting, and Recordkeeping Requirements

#### **§63.11648**

- (a) You must submit the Initial Notification required by §63.9(b)(2) no later than 120 calendar days after the date of publication of the final rule in the FEDERAL REGISTER or within 120 days after the source becomes subject to the standard. The Initial Notification must include the information specified in §63.9(b)(2)(i) through (b)(2)(iv).
- (b) You must submit an initial Notification of Compliance Status as required by §63.9(h).
- (c) If a deviation occurs during a semiannual reporting period, you must submit a deviation report to your permitting authority according to the requirements in paragraphs (c)(1) and (2) of this section.
  - (1) The first reporting period covers the period beginning on the compliance date specified in §63.11641 and ending on June 30 or December 31, whichever date comes first after your compliance date. Each subsequent reporting period covers the semiannual period from January 1 through June 30 or from July 1 through December 31. Your deviation report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.
  - (2) A deviation report must include the information in paragraphs (c)(2)(i) through (c)(2)(iv) of this section.
    - (i) Company name and address.
    - (ii) Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy and completeness of the content of the report.
    - (iii) Date of the report and beginning and ending dates of the reporting period.
    - (iv) Identification of the affected source, the pollutant being monitored, applicable requirement, description of deviation, and corrective action taken.
- (d) If you had a malfunction during the reporting period, the compliance report required in §63.11648(b) must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.11646(b), including actions taken to correct a malfunction.
- (e)You must keep the records specified in paragraphs (e)(1) through (e)(3) of this section. The form and maintenance of records must be consistent with the requirements in section 63.10(b)(1) of the General Provisions.
  - (1) As required in §63.10(b)(2)(xiv), you must keep a copy of each notification that you submitted to comply with this subpart and all documentation supporting any Initial Notification, Notification of Compliance Status, and semiannual compliance certifications that you submitted.
  - (2) You must keep the records of all performance tests, measurements, monitoring data, and corrective actions required by §§63.11646 and 63.11647, and the information identified in paragraphs (c)(2)(i) through (c)(2)(vi) of this section for each corrective action required by §63.11647.
    - (i) The date, place, and time of the monitoring event requiring corrective action;
    - (ii) Technique or method used for monitoring;

#### **§63.11648**

- (iv) Operating conditions during the activity;
- (v) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation; and
- (vi) Maintenance or corrective action taken (if applicable).
- (3) You must keep records of operating hours for each process as required by §63.11646(a)(5) and records of the monthly quantity of ore and concentrate processed or produced as required by §63.11646(a)(10).
- (f) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each recorded action. You must keep each record onsite for at least 2 years after the date of each recorded action according to §63.10(b)(1). You may keep the records offsite for the remaining 3 years.
- (g) After December 31, 2011, within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with this subpart, the owner or operator of the affected facility must submit the test data to EPA by entering the data electronically into EPA's WebFIRE data base through EPA's Central Data Exchange. The owner or operator of an affected facility shall enter the test data into EPA's data base using the Electronic Reporting Tool or other compatible electronic spreadsheet. Only performance evaluation data collected using methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database.

#### **General Provisions**

§63.11650	Table 1 to Subpart	EEEEEEE of Part 63—Applicabil	ity of General	Provisions
	Citation	Subject	Applies to Subpart EEEEEEE	Explanation
	\$63.1(a)(1), (a)(2), (a)(3), (a)(4), (a)(6), (a)(10)-(a)(12), (b)(1), (b)(3), (c)(1), (c)(2), (c)(5), (e)	Applicability	Yes	
	\$63.1(a)(5), (a)(7)- (a)(9), (b)(2), (c)(3), (c)(4), (d)	Reserved	No	
	§63.2	Definitions	Yes	
	§63.3	Units and Abbreviations	Yes	
	§63.4	Prohibited Activities and Circumvention	Yes	
	§63.5	Preconstruction Review and Notification Requirements	Yes	
	\$63.6(a), (b)(1)-(b)(5), (b)(7), (c)(1), (c)(2), (c)(5), (e)(1)(iii), (f)(2), (f)(3), (g), (i), (j)	Compliance with Standards and Maintenance Requirements	Yes	
	\$63.6(e)(1)(i) and (ii), (e)(3), and (f)(1)	Startup, Shutdown and Malfunction Requirements (SSM)	No	Subpart EEEEEEE standards apply at all times.
	\$63.6(h)(1), (h)(2), (h)(4),(h)(5)(i), (ii), (iii) and (v), (h)(6)-(h)(9)	Compliance with Opacity and Visible Emission Limits	No	Subpart EEEEEEE does not contain

			opacity or visible emission limits.
\$63.6(b)(6), (c)(3), (c)(4), (d), (e)(2), (e)(3)(ii), (h)(3), (h)(5)(iv)	Reserved	No	
§63.7, except (e)(1)	Applicability and Performance Test Dates	Yes	
§63.7(e)(1)	Performance Testing Requirements Related to SSM	No	
\$63.8(a)(1), (b)(1), (f)(1)-(5), (g)	Monitoring Requirements	Yes	
\$63.8(a)(2), (a)(4), (b)(2)-(3), (c), (d), (e), (f)(6), (g)	Continuous Monitoring Systems	Yes	Except cross references to SSM requirements in §63.6(e)(1) and (3) do not apply.
§63.8(a)(3)	[Reserved]	No	
\$63.9(a), (b)(1), (b)(2)(i)-(v), (b)(4), (b)(5), (c), (d), (e), (g), (h)(1)-(h)(3), (h)(5), (h)(6), (i), (j)	Notification Requirements	Yes	
§63.9(f)		No	
§63.9(b)(3), (h)(4)	Reserved	No	
\$63.10(a), (b)(1), (b)(2)(vi)-(xiv), (b)(3), (c), (d)(1)-(4), (e), (f)	Recordkeeping and Reporting Requirements	Yes	
§63.10(b)(2)(i)-(v), (d)(5)	Recordkeeping/Reporting Associated with SSM	No	
\$63.10(c)(2)-(c)(4), (c)(9)	Reserved	No	
§63.11	Control Device Requirements	No	
§63.12	State Authority and Delegations	Yes	
§§63.13-63.16	Addresses, Incorporation by Reference, Availability of Information, Performance Track Provisions	Yes	

# Appendix A

### **Compliance Assurance Monitoring (CAM)**

### **Purpose:**

This Application Form is to assist the facility operator in supplying necessary monitoring information for meeting requirements of Title 40, Code of Federal Regulations, Part 64 (40 CFR Part 64) and Rule 201.1. A responsible official of a stationary source subject to Eastern Kern Air Pollution Control District (District) Rule 201.1 and subject to CAM shall use this form as part of an initial permit, a permit renewal, or significant permit modification to Title V permit or Compliance Assurance Monitoring.

#### **Information Required:**

- 1. Describe the indicators to be monitored [Section 64.4(a)(1)];
- 2. Describe the ranges or the processes to set indicator ranges [Section 64.4(a)(2)];
- 3. Describe the performance criteria for monitoring [Section 64.4(a)(3)] including;
  - a. Specification for obtaining representative data;
  - b. Verification procedures to confirm the monitoring operational status;
  - c. Quality assurance and control procedures;
  - d. Monitoring frequency
    - i. 4 times per hour (minimum) if post control emissions are  $\geq$  MST<sup>1</sup>; or
    - ii. 1 time per day (minimum) if post control emissions are < MST.
- 4. Describe indicator ranges and performance criteria for a CEMS<sup>2</sup>, COMS<sup>3</sup>, or PEMS<sup>4</sup> [Section 64.3(a)(4)];
- 5. Describe justification for use of parameters, ranges and monitoring approach [Section 64.4(b)];
- 6. Provide emissions test data [Section 64.4(c)]; and, if necessary
- 7. Provide an implementation plan for installing, testing, and operating the monitoring [Section 64.4(d)];

<sup>&</sup>lt;sup>1</sup> Major Source Trigger (see District Rule 201.1 for requirements)

<sup>&</sup>lt;sup>2</sup> Continuous Emission Monitoring System

<sup>&</sup>lt;sup>3</sup> Continuous Opacity Monitoring System

<sup>&</sup>lt;sup>4</sup> Predictive Emission Monitoring System

# **COMPLIANCE ASSURANCE MONITORING (CAM)**

#### Form 201.1-L

If your Title V facility has control devices in use, the CAM rule may apply. Follow instructions below to determine if your facility is subject to CAM requirements.

- 1. COMPANY/FACILITY NAME: Golden Queen Mining Co. LLC
  2. TITLE V FACILITY NUMBER: 1223
  3. CAM Requirements (see instructions following page)
  - [ ] Emission unit(s) identified below are subject to the CAM rule and a CAM plan is attached for each affected emissions unit. [X] There are no emission units with control devices at this Title V facility that are subject to the CAM rule.

<u>Facility does not have potential pre-control device emissions of applicable regulated air pollutant that are equal to or greater than 100 percent of the amount required to be classified as a major source. Therefore, CAM is not applicable.</u>

<sup>&</sup>lt;sup>1</sup> For more detailed information regarding CAM applicability, refer to 40 CFR Part 64, Section 64.1.

<sup>&</sup>lt;sup>2</sup> Only one CAM plan is required for a control device that is common to more than one emissions unit, or if an emissions unit is controlled by more than one control device similar in design and operation. If control devices are not similar in design and operation, on plan is required for each control device.

<sup>&</sup>lt;sup>3</sup> List all new and existing emission units and connected devices by District permit number or equipment number. When an emissions unit is new and does not have a District permit number, leave this column blank.

<sup>&</sup>lt;sup>4</sup> Provide brief description (equipment type, make, model and serial number) of the emissions units and control devices as appropriate.

<sup>&</sup>lt;sup>5</sup> Potential to Emit.

### **Instructions to Determine CAM Rule Applicability:**

With the exception of municipally-owned back-up utility power generating units (described in 40 CFR Part 64, Section 64.2(b) (2)<sup>1</sup>, the CAM rule is applicable to each emissions unit (existing and new construction) at a title V facility that meets ALL the following criteria<sup>2</sup>:

- 1. The emission unit is subject to an emission limitation or standard<sup>3</sup> (often found in permit conditions);
- 2. The emission unit uses a control device to achieve compliance with the emission limitation or standard; and
- 3. The emission unit has a pre-control potential to emit (PTE)<sup>4</sup>, that is equivalent or exceeds any Title V major source thresholds as shown on the following table:

	CAM PTE <sup>4</sup> Emission Threshold For
	Individual Emission Unit at Title V Facility
Pollutant	(tons per year)
PM <sub>10</sub>	100
SOx	100
NOx	100
VOC	100
CO	100
1 HAP <sup>5</sup>	10
2+ HAPs	25

For emission units with control devices that are subject to the following federal enforceable requirements, the CAM rule does NOT apply: 1) NSPS (40 CFR Part 60); 2) NESHAP (40 CFR Parts 61 and 63); 3) Title VI of the Federal Clean Air Act (CAA) for Stratospheric Ozone Protection; 4) Any emission cap that is federally enforceable, quantifiable, and meets the requirements in 40 CFR Part 70, Section 70.4 (b)(12); and 5) Emission limitations or standards a continuous compliance determination method is required.

<sup>&</sup>lt;sup>1</sup> The facility must attach the documentation required by 40 CFR Part 64, Section 64.2(b) (2) to demonstrate the backup utility power unit only operates during periods of peak demand or emergency situations; and has actual emission, averaged over the last three calendar years of operation less than 50% of the major source emission thresholds.

<sup>&</sup>lt;sup>2</sup> Additional information about the CAM Rule can be found on U.S. EPA website at <a href="http://www.epa.gov.ttnemc01/cam.html">http://www.epa.gov.ttnemc01/cam.html</a> .

<sup>&</sup>lt;sup>3</sup> Only emission limitation and standards from an "applicable requirement" from emission units with control devices are subject to the CAM rule. Applicable requirements are federally-enforceable requirements are rules adopted by the District or the State and are approved by EPA as part of the State Implementation Plan (SIP) {aka "SIP approved Rules")

<sup>&</sup>lt;sup>4</sup> See District Rule 210.1.IV.E.

<sup>&</sup>lt;sup>5</sup> Hazardous Air Pollutants.

# Appendix B

# **Greenhouse Gas Facility Wide Reporting**

### **Greenhouse Gases:**

Carbon dioxide (CO<sub>2</sub>), Nitrous oxide (N<sub>2</sub>O), Methane (CH<sub>4</sub>), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), and Sulfur Hexafluoride (SF<sub>6</sub>).

Estimated by Source

GHG EMISSIONS (short tons per year)							
Pollutants:	$CO_2$	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Total
Emissions (tpy):	16,072						
*GWP:	1	21	310	**	**	23,900	
CO2e (tpy):	16,072						16,072

<sup>\*</sup>Global Warming Potential (GWP): The capacity to heat the atmosphere, calculated as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram (kg) of a substance relative to that of 1 kg of CO2. GWP shall be calculated according to the factors for a 100-year time horizon, as stated in 40 CFR Part 98 Subpart A Table A-1 (Global Warming Potentials).

<sup>\*\*</sup> GWP varies based on each pollutant.