

EASTERN KERN AIR POLLUTION CONTROL DISTRICT



**MAJOR SOURCE
PERMIT TO OPERATE**

2700 "M" Street, Suite 302
Bakersfield, CA 93301-2370
Bakersfield: (661) 862-5250
Field Office: (661) 823-9264

Permittee: U. S. Borax, Inc.

Location: 14486 Borax Road
Boron, California 93516-2000

Permit No: 1004-V-2000

Issuance Date: Month XX, 2026

Expiration Date: Month XX, 2031

Nature of Business: Producer of Borate Compounds

This permit is issued pursuant to, and is conditioned upon, compliance with provisions of the Eastern Kern Air Pollution Control District (District) Rules and Regulations as authorized by the California Health and Safety Code (CH&SC), 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 United States Environmental Protection Agency (EPA) and District. Those provisions which are not required by the CAAA are considered to be District provisions and are not federally enforceable by EPA.

By:

Gary Ray, Jr.
Air Pollution Control Officer

TABLE OF CONTENTS

General Permit Conditions

<u>Emission Unit</u>	<u>Description of Source</u>
001	Primary Crusher & Ore Stacking Operation
002	Secondary Screening & Crushing Operation
003	Fluid Bed Dryer/Conveying System
005	Neobor Rotary Drying Operation
006	5 Mol Screening
007	5 Mol High Speed Conveying
008	5 Mol Railcar Loadout
009	5 Mol Packing Operation
010	5 Mol Furnace Feed
012	10 Mol Dryer #2
013	10 Mol Dryer #3
014	10 Mol Dryer #4
015	10 Mol Dryer #5
016	10 Mol Crushing/Screening Operation
017	10 Mol Railcar Loadout
018	10 Mol Packing Operation
019	10 Mol Furnace Feed
027	Line 7 Fusing
028	Line 7 Cooling/Milling/Screening
029	Anhydrous Borax Loadout Operation
030	Anhydrous Borax Screening/Loadout West

TABLE OF CONTENTS

<u>Emission Unit</u>	<u>Description of Source</u>
031	Anhydrous Borax Packing
032	Fusing & Anhydrous Boric Acid Plants
033	Anhydrous Boric Acid Cooling/Milling/Screening/Storage Supra Bag Loadout Operation
035	Anhydrous Boric Acid Loadout
040	Boiler #5
041	Boiler #6
047	Research Pilot Plant
048	Anhydrous Boric Acid Packing
049	Soda Ash Receiving/Storage/Handling
050	5 Mol Fines Receiving/Storage/Handling
053	5 Mol/R46 Truck Loadout Operation
056	Boiler #7
058	Boric Acid Ore Reclaim Operation
059	Boric Acid Rotary Reactor Scrubber
060	Boric Acid #1 Drying/Screening/Milling/Storage Operation
061	Boric Acid #2 Operation
062	Boric Acid #3 Drying Operation
063	Boric Acid Screening/Milling/Conveying & Truck Loadout Operation
064	Boric Acid Pneumatic Conveying to Storage Operation
065	Boric Acid Off-Specification Recycle Operation
066	Boric Acid Conveying to Railcar Loadout & Packaging Bins

TABLE OF CONTENTS

<u>Emission Unit</u>	<u>Description of Source</u>
067	Boric Acid Off-Specification Packing & Railcar Loadout Operation
068	Boric Acid “Bulk Pak” Loading Operation
069	Sulfuric Acid Receiving & Storage Operation
070	Sulfuric Acid Day Tank & Feed Operation
071	5 Mol/R46 Truck Loadout Operation
073	One Diatomaceous Earth Receiving & Storage Operation
077	Co-Generation Facility I
085	Bulk Container Pneumatic Loading Operation
089	Gasoline Storage & Dispensing Operation
104	Cooling Tower (Cells 1-5)
105	Cooling Tower (2 Cells)
168	Piston Engine with Fire Pump
177	Paint Spray Booth
180	Sandblasting Operation
182	Bulk Storage Facility (Dome #1 West)
183	Bulk Storage Facility (Dome #2 East)
185	Industrial Vacuum System
186	Industrial Vacuum System
188	Industrial Vacuum System
205	Flocculent Feed Tank with Bin Vent Dust Collector
207	Borates Tailings Ponds Reclamation
208	On-Site Landfill Operation

TABLE OF CONTENTS

<u>Emission Unit</u>	<u>Description of Source</u>
213	Ammonium Nitrate Storage Unloading Operation #3
222	Boric Acid Dryer
223	Granubor II Production Operation
228	Power Prime Pump
267	Stand-By Secondary Crushing Unit
268	Bag Rejecter
275	Emergency Generator
276	Emergency Generator with Diesel Piston Engine
279	Outdoor Abrasive Blasting Operation
282	Air Compressor
283	Emergency Generator Set
289	Abrasive Blasting Operation
290	Portable Screening Unit
294	Street Sweeper
296	Surface Coating Operation with Paint Spray Booth (Utility Shop)
297	Pond Pump
298	Pond Pump
299	On-Site Portable Emergency Pump
300	On-Site Portable Emergency Pump
301	On-Site Portable Emergency Pump
303	Portable Dry Bulk Loading System
304	Back-up Compressor

TABLE OF CONTENTS

<u>Emission Unit</u>	<u>Description of Source</u>
307	Portable Stacker
311	Street Sweeper
314	Floor Sweeper
315	Floor Sweeper
316	Industrial Vacuum Unit
317	Industrial Vacuum Unit
318	Portable Industrial Vacuum Unit
319	Industrial Vacuum Truck
320	Industrial Vacuum Unit
321	Generator Set with Diesel Fueled Piston Engine
322	TREU Repalcing Function of Co-Generation Facility
323	TREU Repalcing Function of Co-Generation Facility
324	Street Sweeper
325	Emergency Water Pump Driven by Diesel Fuled Piston Engine
326	Emergency Water Pump Driven by Diesel Fuled Piston Engine
327	Emergency Water Pump Driven by Diesel Fuled Piston Engine
328	Prime Water Pump Driven by Diesel Fuled Piston Engine

Federal Regulations

<u>Subpart</u>	<u>Description</u>
<u>40 CFR Part 60</u>	
Subpart A	General Provisions
Subpart Dc	Small Industrial-Commercial-Institutional Steam Generating Units
Subpart GG	Stationary Gas Turbine Engines
Subpart OOO	Nonmetallic Mineral Processing Plants
Subpart IIII	Compression Ignition Internal Combustion Engines
<u>40 CFR Part 61</u>	
Subpart M	Asbestos
<u>40 CFR Part 63</u>	
Subpart A	General Provisions
Subpart AAAA	Municipal Solid Waste Landfills
Subpart ZZZZ	Stationary Reciprocating Internal Combustion Engines
Subpart CCCCCC	Gasoline Dispensing Facilities
<u>Appendices</u>	
Appendix A	PSD Permit Conditions
Appendix B	Compliance Assurance Monitoring (CAM Plan)
Appendix C	Greenhouse Gas Facility Wide Reporting

General Permit Conditions

In accordance with CH&SC, Sections 39002 and 42301.10 through 42301.12 and all applicable 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.	<u>Inspections</u> 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.	<u>Stack Monitoring</u> 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
3.	<u>Source Sampling</u> 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 (PM₁₀) 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
4.	<u>Equipment Breakdown</u> An occurrence which constitutes a breakdown condition, and which persists only until the end of the production run or 24-hours, whichever is sooner (except for continuous monitoring equipment, for which the period shall be ninety-six (96) hours), shall constitute a violation of any applicable emission limitation or restriction prescribed by these Rules and Regulations; however, no enforcement action may be taken provided the owner or operator demonstrates to the Control Officer that a breakdown condition exists and the proper requirements are met.	Reg. I, Rule 111

	Federally Enforceable Conditions	Reg/Rule
5.	<u>Severability</u> 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 judgment 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 judgment 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 issued in any case had such invalid provision or provisions not been included.	Reg. I, Rule 114
6.	<u>Applicability of Federally Enforceable Conditions</u> Federally Enforceable Conditions <u>shall apply</u> to Design Conditions, Operational Conditions, Special Conditions, Compliance Testing Requirements, and Emission Limits. Any District or State-only condition (not required by the EPA) does not apply.	Reg. II, Rule 201.1
7.	<u>Compliance with Permit Conditions</u> A. U.S. Borax shall comply with all permit conditions; B. Permit does not convey any property rights or any exclusive privilege; C. Non-compliance with any permit condition shall be grounds for permit termination, revocation and reissuance, modification, enforcement action or denial of permit renewal; D. U.S. Borax 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; E. Pending permit action or notification of anticipated non-compliance does not stay any permit condition; and F. Within a reasonable time period, U.S. Borax 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.	Reg. II, Rule 201.1
8.	<u>Permit Life</u> The life of this permit shall be five years from the date of issuance.	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
9.	<u>Administrative Permit Amendment and Minor Permit Modification</u> 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
10.	<u>Emergency Provisions</u> A. U.S. Borax shall comply with the requirements of Rule 111 and the emergency provisions contained in all permit streamlining requirements imposed in accordance with Subsection VI.J. all District-only rules which apply in accordance with Subsection VI.K.1. and all applicable federal requirements not subsumed by such permit streamlining requirement(s) or District-only rules; B. Within two weeks of an emergency event, an owner or operator of the source shall submit to the District a properly signed, contemporaneous log or other relevant evidence which demonstrates that: 1) An emergency occurred; 2) The permittee can identify the cause(s) of the emergency; 3) The facility was being properly operated at the time of the emergency; 4) All steps were taken to minimize the emissions resulting from the emergency; and 5) Within two working days of the emergency event, the permittee provided the District with a description of the emergency and any mitigating or corrective actions taken; C. In any enforcement proceeding, the permittee has the burden of proof for establishing that an emergency occurred.	Reg. II, Rule 201.1
11.	<u>Referencing of District and Applicable Requirements</u> 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: Each reference shall include, at a minimum, title or document number, author and recipient if applicable, date, citation of relevant sections of the Rule or document, and identification of specific source activities or equipment for which the referencing applies.	Reg. II, Rule 201.1

	<u>Federally Enforceable Conditions</u>	Reg/Rule
12.	<u>Record Keeping</u> A. Recording of maintenance of all monitoring and support information associated with all permit streamlining requirements imposed in accordance with Rule 201.1, Subsection VI.J., all District-only rules which apply in accordance with Rule 201.1, Subsection VI.K.1., and all applicable federal requirements not submitted by such permit streamlining requirement(s) or District-only rules, including: 1) Date, place, and time of sampling; 2) Operating conditions at time of sampling; 3) Date, place, and method of analysis; and 4) Results of analysis; 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 Rule 201.1, Subsection VI.J., all District-only rules which apply in accordance with Rule 201.1, Subsection VI.K.1., and all applicable federal requirements not subsumed by such permit streamlining requirement(s) or District-only rules.	Reg. II, Rule 201.1
13.	<u>Right of Entry</u> U.S. Borax 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

	<u>Federally Enforceable Conditions</u>	Reg/Rule
14.	<u>Reporting</u> A. Any non-conformance with permit requirements, including any attributable to emergency conditions (as defined in Rule 201.1) shall be promptly reported to the APCO and in accordance with Rule 111; 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; C. All reports of non-conformance with permit requirements shall include probable cause of non-conformance and any preventative or corrective action taken; D. Progress report shall be made on a compliance schedule at least semi-annually and including: 1) Date when compliance will be achieved, 2) Explanation of why compliance was not, or will not be achieved by the scheduled date, and 3) Log of any preventative or corrective action taken; and E. Each monitoring report shall be accompanied by a written statement from the responsible official certifying the truth, accuracy, and completeness of the report.	Reg. II, Rule 201.1
15.	<u>Testing</u> U. S. Borax 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 5, 10, 18, 20 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. (PSD Permit #SE82-02 and District Rule 210.1)	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
16.	<u>Periodic Monitoring</u> <u>Non-Point</u> U.S. Borax shall conduct testing semi-annually, in accordance with the methodology contained in EPA Method 22 for all active 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 and that source is not operating under breakdown condition as defined in and allowed for in District Rule 111, U.S. Borax 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. <u>Point</u> U.S. Borax shall conduct testing semi-annually, in accordance with the methodology contained in EPA Method 22 for all active/in use 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 and that point source is not operating under breakdown condition as defined in and allowed for in District Rule 111, U.S. Borax 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, 406 and/or 210.1.	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
17.	<u>Additional Monitoring</u> 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. U.S. Borax 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. Scrubbers: Weekly records of pressure drop and scrubber liquid flowrate shall be kept.	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
18.	<u>Monitoring, Testing, Record Keeping Requirements</u> (GDF Phase I) Applies to EU 089. All data necessary to demonstrate qualifications for the exemptions allowed in District Rule 412 shall be maintained on the premise at all times and shall be submitted for District review upon request. Such records shall include exemption status and volume delivered to each stationary storage container serviced. A. Compliance with the vapor recovery requirements of District Rule 412 shall be demonstrated using California Air Resources Board (CARB) Method 202; B. True vapor pressure shall be determined using Reid vapor pressure ASTM Method No. D 5191-01 at storage temperature; and C. The test method to determine vapor tightness of delivery vessels shall be EPA Method 27.	Reg. II, Rule 201.1
19.	<u>Monitoring, Testing, Record Keeping Requirements</u> (GDF Phase II) Applies to EU 089. 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. 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"	Reg. II, Rule 201.1 Reg. IV, Rule 412
20.	<u>Conditional Approval</u> 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.	Reg. II, Rule 209

	Federally Enforceable Conditions	Reg/Rule
	Federally Enforceable Conditions	Reg/Rule
21.	<u>Standards for Authority to Construct</u> A. Permittee may make a change to this permitted facility that is not addressed or prohibited by the federally enforceable conditions of this Part 70 permit without obtaining a Part 70 permit revision if: 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; 3) The change is not a Title I modification; and 4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of this permit. 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.	Reg. II, Rule 210.1 Section IV. D.3
22.	<u>Prevention of Significant Deterioration (PSD)</u> U.S. Borax may be subject to District Rule 210.4, Prevention of Significant Deterioration (PSD) if it undergoes major modification(s).	Reg. II, Rule 210.4

	<u>Federally Enforceable Conditions</u>	Reg/Rule
23.	<u>Permit Fees</u> 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 VIII.B. shall supplement applicable Rules 301 and 301.3 fee requirements. <u>Payment of Supplemental Fee</u> An owner or operator, or his designee, shall pay an annual supplemental fee for a permit to operate pursuant to Rule 201.1 as determined by the calculation method in Subsection VIII.B.3., 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 VIII.B.2. applies.	Reg. III, Rule 301 Rule 201.1 Section VIII.B.
24.	<u>Greenhouse Gas Fee</u> 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
25.	<u>Visible Emissions</u> Unless otherwise stated in equipment specific permits, the following limits apply: 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.	Reg. IV, Rule 401

	Federally Enforceable Conditions	Reg/Rule
26.	<u>Particulate Matter Concentration - Desert Basin</u> 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.	Reg. IV, Rule 404.1
27.	<u>Particulate Matter - Emission Rate</u> 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.	Reg. IV, Rule 405
28.	<u>Sulfur Compounds</u> 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 (SO₂).	Reg. IV, Rule 407
29.	<u>Fuel Burning Equipment - Combustion Contaminants</u> A. Fuel burning equipment, the construction or modification of which is commenced after August 17, 1971, shall not discharge into the atmosphere particulate matter, sulfur dioxide or nitrogen oxides in excess of the Environmental Protection Agency Standard of Performance. B. A person shall not discharge into the atmosphere combustion contaminants exceeding in concentration at the point of discharge: 0.1 grain per cubic foot of gas calculated to 12 percent of carbon dioxide (CO₂) at standard conditions.	Reg. IV, Rule 409
30.	<u>Organic Solvents</u> A person shall not discharge into the atmosphere more organic materials in any one day from any article, machine, equipment or other contrivance in which any organic solvent or any material containing organic solvent is utilized unless the emissions are controlled or reduced as outlined in the organic solvent rule (410).	Reg. IV, Rule 410

	Federally Enforceable Conditions	Reg/Rule
31.	<u>Disposal and Evaporation of Solvents</u> A person shall not during any one day disposed of a total of more than 1½ gallons of any photochemically reactive solvent as defined in Rule 410.2, or of any material containing more than 1½ gallons of any such photochemically reactive solvent into the atmosphere.	Reg. IV, Rule 410.2
32.	<u>Organic Solvent Degreasing Operation</u> A person shall not operate any organic solvent degreasing operation unless the equipment utilized complies with all applicable requirements of Rule 410.3.	Reg. IV, Rule 410.3
33.	<u>Metal and Plastic Parts and Products Coating Operations</u> Permittee may be subject to provisions of Rule 410.4 that apply to surface coating of metal parts or products and plastic parts or products including automotive, transportation, and business machine, and to the cleaning, storage, and disposal of all organic solvents and waste solvent materials associated with such coating operations.	Reg. IV, Rule 410.4
34.	<u>Motor Vehicle and Mobile Equipment Refinishing Operations</u> Permittee may be subject to provisions of Rule 410.4A that apply to the use or application of any automotive coating or associated solvent within the District.	Reg. IV, Rule 410.4A
35.	<u>Storage of Organic Liquids</u> A person shall not use equipment to store organic liquids and petroleum distillates with a true vapor pressure greater than 1.5 psia unless provisions are made for controlling organic vapors.	Reg. IV, Rule 411
36.	<u>Gasoline Transfer into Stationary Storage Containers, Delivery Vessels and Bulk Plants</u> A person shall not transfer gasoline from any delivery vessel into any stationary storage container unless all applicable provisions of Rule 412 are met.	Reg. IV, Rule 412
37.	<u>Transfer of Gasoline into Vehicle Fuel Tanks</u> No person shall transfer gasoline into vehicle fuel tanks unless CARB-Certified Phase II dispensing equipment is utilized and maintained in correct working order.	Reg. IV, Rule 412.1

	Federally Enforceable Conditions	Reg/Rule
38.	<u>Open Burning</u> <u>Applicability</u> This Rule shall apply to all burning activities not confined to an incinerator which meets requirements of Rule 418 (Incinerators), but shall not apply to combustion of fuels in a device designed to produce useful energy and which meets all applicable parts of Regulation IV. <u>Prohibition</u> No person shall burn any refuse or other material in an open outdoor fire within the boundaries of the District, unless any of the exceptions in Rule 416 apply. Burning of Federal facility materials must comply with applicable requirements of Section V of Rule 416.	Reg. IV, Rule 416
39.	<u>Nuisance</u> 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
40.	<u>Federal New Source Performance Standards (NSPS)</u> Provisions of Part 60, Chapter 1, Title 40, Code of Federal Regulations, in effect September 5, 1996, are hereby adopted by reference and made a part hereof. All new and modified sources shall comply with standards, criteria and requirements set forth therein. All applicable requirements of 40 CFR Part 60, Subparts A (General Requirements), Dc (Small Industrial-Commercial-Institutional Steam Generating Units), GG (Stationary Gas Turbine Engines), OOO (Nonmetallic Mineral Processing Plants), and IIII (Compression Ignition Internal Combustion Engines) apply to this facility.	Reg. IV, Rule 422

	Federally Enforceable Conditions	Reg/Rule
41.	<u>National Emission Standards for Hazardous Air Pollutants and Source Categories (NESHAPS)</u> Provisions of Title 40, Chapter 1, Parts 61 and 63, Code of Federal Regulations, in effect November 7, 2002, 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 (Asbestos) and 40 CFR Part 63, Subparts A (General Provisions), AAAA (Municipal Solid Waste Landfills), ZZZZ (RICE), and CCCCCC (Gasoline Dispensing Facilities) apply to this facility. Asbestos U.S. Borax shall comply with the applicable requirements of Sections 61.145 through 61.147 of the National Emission Standard for Asbestos for all demolition and renovation projects.	Reg. IV, Rule 423
42.	<u>Cogeneration Gas Turbine Engines (Oxides of Nitrogen)</u> Provisions of this Rule shall apply to any stationary gas turbine with a rating equal to or greater than 0.88 megawatts (MW).	Reg. IV, Rule 425
43.	<u>Boilers, Steam Generators, and Process Heaters (Oxides of Nitrogen)</u> An owner/operator of any emission unit with annual heat input of 90,000 therms or more during one or more of the three preceding years of operation shall comply with applicable NOx emission limit(s) listed in Section V, Requirements of Rule 425.2.	Reg. IV, Rule 425.2
44.	<u>Clean Air Act</u> Should this stationary source, as defined in 40 C.F.R. section 68.3, become subject to the accidental release prevention regulations in part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in section 68.10 and shall certify compliance with the requirements of part 68 as part of the annual compliance certification as required by 40 C.F.R. part 70 or 71.	CAA Section 112(r)(7)
45.	<u>Risk Management Plan</u> Should this stationary source, as defined in 40 CFR section 68.3, become subject to the accidental release prevention regulations in part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in section 68.10 and shall certify compliance with the requirements of part 68 as part of the annual compliance certification as required by 40 CFR part 70 or 71.	40 CFR 68

	Federally Enforceable Conditions	Reg/Rule
46.	<u>Compliance Certification</u> The owner/operator shall comply with the following procedures for compliance certification: 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 March 28 of each year and end March 27 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, Air Division 75 Hawthorne Street AIR-3 San Francisco, CA 94105	40 CFR 70.5d
47.	<u>Protection of Stratospheric Ozone</u> 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.	40 CFR 82

List of Insignificant Air Pollutant Emitting Equipment

Space Heating Equipment

Welding Equipment

Portable IC Engines - California Registered

Small IC Engines < 50 bhp

Boilers & Heaters < 5 MM Btu/hr

Air Conditioning Equipment

Atomic Absorption

Bunsen Burners

Inductively Coupled Plasma

Steam Cleaners, Natural Gas

Water Heaters, Natural Gas

Motor Vehicles as Defined in the CH&SC

Spectro Photometer

Above Ground Fuel Oil Storage Tanks

Small Degreasing Operations

Emission Unit 001 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	001	Primary Crusher & Ore Stacking Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Primary Crusher and Ore Stacking Operation, including following equipment:

- A. 75-hp Primary Crusher A Takeaway Conveyor (PCC-BC-102);
- B. 250-hp Primary Crusher B Feed Conveyor (PCC-BC-103);
- C. 75-hp Stacker Feed Conveyor (PCC-BC-105);
- D. 3-hp Feeder Spillage Conveyor (PCC-SC-101);
- E. 5-hp Transfer Spillage Conveyor;
- F. 125-hp Stacker Transfer Conveyor;
- G. 150-hp Apron Feeder (PCC-FD-100);
- H. 7.5-hp Primary Crusher A Fabric Collector (PCC-DC-100);
- I. 25-hp Primary Crusher B Fabric Collector, with exhaust fan rated at 6,000-scfm;
- J. Enclosed screw conveyor returning collected fines from dust collector B back to product stream;
- K. 20-hp Takeaway Conveyor Tramp Metal Magnet (PCC-MG-102);
- L. 450-hp Primary Crusher A (PCC-ML-100);
- M. 400-hp Primary Crusher B (PCC-ML-101);
- N. 33-hp Rock Breaker;
- O. 10-hp Primary Sampler;
- P. Vacuum system (PCC-DC-102)
- Q. 0.5-hp Sample Crusher Feeder;
- R. 7.5-hp Sample System Crusher;
- S. 1.5-hp Secondary Crusher;
- T. 5-hp Sample Rejects Conveyor; and
- U. 160-hp Ore stockpile with traveling double wing stacker.

OPERATIONAL CONDITIONS:

- 1. Fabric collector shall be equipped with operational pressure differential indicator. (Rule 210.1)
- 2. Each fabric collector pulse-jet cleaning mechanism shall be provided with compressed air supply of adequate pressure and volume. (Rule 210.1)
- 3. Fabric collector exhaust stack shall be equipped with adequate provisions facilitating collection of samples consistent with EPA test methods, i.e. capped sample port in accessible location of uniform flow. (Rule 108.1)
- 4. Visible emissions from fabric collectors shall not exceed 5% opacity for more than three minutes in any one-hour. (Rule 210.1 BACT Requirement)
- 5. Particulate matter emission concentration from each fabric collector exhaust stack shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement and Rule 422 NSPS, Subpart OOO)

Emission Unit 001 Permit Conditions

6. Fabric collector, related piping, and connections shall be maintained dust-tight; i.e. equipment shall be maintained so as not to allow fugitive emissions. (Rules 209 and 210.1)
7. Exhaust flow rate from fabric collector serving primary crusher A shall not exceed 3,375-cfm without prior District approval. (Rule 210.1)
8. Exhaust flow rate from fabric collector serving primary crusher B shall not exceed 6,000-cfm without prior District approval. (Rule 210.1)
9. Screw conveyors and belt conveyor transfer points shall be covered while operating. (Rule 210.1 BACT Requirement)
10. Material removed from each fabric collector and other collected fines shall be returned to product stream or otherwise disposed of using a method preventing entrainment in atmosphere. (Rule 210.1 BACT Requirement)
11. Visible emissions generated by fugitive sources including conveyor transfers points shall not exceed 7% opacity for more than three minutes in any one hour. (Rule 422 NSPS, Subpart OOO)
12. 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 a readily available format. (Rule 209)
13. No emission resulting from the 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)
14. Equipment breakdowns resulting in non-compliance with any emission limitations shall be reported pursuant to Rules 111 and 422. (Rules 111 and 422)
15. 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)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be demonstrated pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request or initial use of equipment. 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:

Primary Crusher A Fabric Collector:
(3,375 scfm)

0.01	gr./dscf (Rule 210.1 BACT Requirement)
0.29	lb/hr
6.94	lb/day (PM ₁₀)
1.27	ton/yr

Emission Unit 001 Permit Conditions

Primary Crusher B Fabric Collector:	0.01	gr./dscf (Rule 210.1 BACT Requirement)
(6,000 scfm)	0.51	lb/hr
	12.34	lb/day (PM ₁₀)
	2.25	ton/yr (PM ₁₀)
Fugitive Emissions:	2.05	lb/hr (PM ₁₀)
(Loading, Conveyors, Open Storage, etc.):	49.09	lb/day (PM ₁₀)
	8.95	ton/yr (PM ₁₀)

(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 documenting 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 002 Permit

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	002	Secondary Screening & Crushing Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Secondary Screening and Crushing Operation, including following existing equipment:

- A. Traveling Hopper Feeder (ORS-HO-002) with 2 - 10 horsepower (hp) motors;
- B. 110 ft. span bucket wheel reclaimer, (ORS-WH-001) with three 75-hp motors; and feed (ORS-FD-026);
- C. 25-hp belt conveyor (ORS-BC-002);
- D. 100-hp reclaim belt conveyor (ORS-BC-003);
- E. Reclaim magnet (ORS-MG-071);
- F. 7.5-hp double deck screen, (DIS-SN-101);
- G. 100-hp roll crusher A, (DIS-ML-101);
- H. 100-hp roll crusher B, (DIS-ML-102);
- I. 3-hp screening area fabric dust collector (DIS-DC-101), (with 49 - 4.625" dia. X 6' polyester felt filter bags), serving screening area inlet conveyor;
- J. 7.5-hp crushing area fabric dust collector (DIS-DC-102), (with 49 - 4.625" dia. X 8' polyester felt filter bags), serving crushing area exit conveyor;
- K. 40-hp crusher discharge transfer conveyor (DIS-BC-101);
- L. 100-bhp incline belt conveyor (DIS-BC-103) to fine ore bins;
- M. 1-hp sample splitter;
- N. Split ore sample container;
- O. Sample ore crushing equipment (in Quality Control Laboratory);
- P. 40-hp covered belt tripper to fine ore bins (DIS-BC-004);
- Q. Four fine ore storage bins (DIS-BN-001, '002, '003, and 004);
- R. 75-hp blower serving five compartment fabric dust collector serving fine ore bins, with reverse jet cleaning mechanism and 5 bin vibrators (DIS-DC-005) bin vibrators all serving fine ore bins;
- S. Dust collector discharge screw conveyors (DIS-SC-105 and MDK-SC-102) each with 8-hp motor;
- T. Vacuum collection system (DIS-DC-008) with 15-hp fan (DIS-FN-004) and blower (DIS-FN-015);
- U. Incline belt conveyor (DIS-BC-004) with 15-hp motor;
- V. Quality control laboratory and core shed sample ore crushing equipment;
- W. Feeders to Bin No. 1 (MDK-FD-100), Bin No. 2 (MDK-FD-101), EACH WITH 7.5 HP MOTOR;
- X. Feeders to Bin No. 3 (DIS-FD-058), and Bin No. 4 (DIS-FD-57) each with 2-hp motor;
- Y. 25-hp north incline belt conveyor (DIS-BC-018);
- Z. 25-hp south incline belt conveyor (DIS-BC-108);
- AA. 75-hp north incline belt conveyor (DIS-BC-063) to dissolver;
- BB. 50-hp south incline belt conveyor (DIS-BC-005) to dissolver.
- CC. Ore bin draw-off belt conveyor (MDK-BC-100) with 15 hp electric motor transporting crushed ore from Bin 1 to incline belt which is an air supported conveyor which includes a 7.5 hp blower fan (MDK-FN-104);

Emission Unit 002 Permit Conditions

- DD. Ore bin draw-off belt conveyor (MDK-BC-101) with 15 hp electric motor transporting crushed ore from Bin 2 to incline belt which is an air supported conveyor which includes a 7.5 hp blower fan (MDK-FN-105);
- EE. Soda ash transfer screw conveyors (MDK-SC-101 and MDK-SC-240) each with 8 hp motor;
- FF. Mill feed belt conveyor (MDK-BC-103) with 30-hp electric motor transporting crushed ore from interchange to cage mills which includes an air supported conveyor that includes a 20 hp blower fan (MDK-FN-106);
- GG. Cage mill (MDK-ML-101) performing dry grinding of incoming with 900-hp and 600-hp motors;
- HH. Mill feed dust collector (MDK-DC-101) including exhaust fan (MDK-FN-101) with 40-hp motor and 6000-acfm exhaust flow rate;
- II. Dissolver tank feed conveyor belt (MDK-BC-105) with 50-hp electric motor which is an air supported conveyor that includes a 20 hp blower fan (MDK-FN-107);
- JJ. Dissolver tank No. 1 (MDK-TK-201) providing mixing volume and mother liquor, 40-ft diameter including agitator with 150-hp tor;
- KK. Dissolver tank No. 2 (MDK-TK-202) providing mixing volume and mother liquor, 40-ft diameter including agitator with 150-hp motor; and
- LL. Wet scrubber (MDK-SB-201) capturing dust from overhead vent streams from dissolver tanks including exhaust fan (MDK-FN-201) with 50-hp motor and 1,131-scfm exhaust flow rate.

OPERATIONAL CONDITIONS:

- 1. Fabric collector and wet scrubber each shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 2. Each fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
- 3. All conveyors shall be equipped with dust-tight covers. (Rule 210.1)
- 4. Particulate matter exhaust concentration from fabric collectors MDK-DC-101 shall not exceed 0.01-gr/scf without prior District approval. (Rule 210.1 BACT Requirement)
- 5. Particulate matter exhaust concentration from wet scrubber MDK-SB-201 shall not exceed 0.01-gr/scf without prior District approval. (Rule 210.1 BACT Requirement)
- 6. Process weight rate for each cage mill crusher shall not exceed 450-tons per hour without prior District approval. (Rule 210.1)
- 7. Visible emissions from fabric collector and conveyors shall not exceed 7 percent opacity.
- 8. Visible emissions from vacuum system related piping, and connections shall not exceed 5% opacity or Ringelmann ¼ for 3 minutes in any one-hour. (Rule 210.1)
- 9. Fabric collectors shall be maintained in proper working order. (Rule 210.1)
- 10. Process shall not be operated unless emission control equipment is in operation. (Rules 210.1 & 209)
- 11. Material removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 12. All material transfer points and storage bins shall be vented to dust collector. (Rule 209)
- 13. Screw conveyors shall discharge collected dust back to process at existing ventilation hoods connected to existing dust control system or to enclosed dust dump hopper through coaxial loadout spout ventilated to Northwest Model 60-8 BR fabric collector (DIS-DC-005). (Rule 210.1)
- 14. There shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)
- 15. Screen covers shall always be in place during operation. (Rule 210.1)
- 16. All exhaust ducts shall be connected to appropriate collection equipment. (Rule 210.1)

Emission Unit 002 Permit Conditions

17. All collection equipment shall be strictly maintained. (Rule 210.1)
18. Free moisture content of ore shall be maintained at no less than 3% by weight. (Rule 401)
19. Collected dust dump hopper shall be maintained dust-tight. (Rule 210.1)
20. Ductwork connecting material drop points and ore storage bins shall be maintained in air-tight condition. (Rule 210.1)
21. Vacuum system, related piping, and connections shall be maintained "dust-tight"; equipment shall be maintained so as not to allow visible greater than 5% opacity or fugitive emissions. (Rules 210.1)
22. Vacuum system shall be operated with collection bags having no tears or similar damage. (Rule 210.1)
23. Process weight rate for secondary crusher shall not exceed 1,000 tons per hour without prior District approval. (Rule 210.1)
24. Permittee shall keep accurate daily records of process weight rates and make such records readily available to District upon request. (Rule 210.1)
25. Records of processing throughput shall be maintained and made available upon request for inspection. (Rule 210.1)

COMPLIANCE TESTING REQUIREMENTS:

Compliance with each fabric collector exhaust PM₁₀ emission sampling limits shall, if visible emissions are detected, be demonstrated by District-witnessed sample collection by independent testing laboratory, and official test results and field data submitted within 60 days after collection. (Rule 208.1)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector (DIS-DC-101)	0.11	lb/hr
	2.69	lb/day
	0.49	tons/yr
Fabric Collector (DIS-DC-102)	0.37	lb/hr
	8.96	lb/day
	1.62	tons/yr
Fabric Collector (DIS-DC-005)	1.20	lb/hr
	28.80	lb/day
	5.26	tons/yr
Fabric Collector (MDK-DC-101)	0.01	gr/scf
	0.51	lb/hr
	12.34	lb/day
	2.25	tons/yr

Emission Unit 002 Permit Conditions

Wet Scrubber (MDK-SB-201)

0.01 gr/scf
0.10 lb/hr
2.4 lb/day
0.42 tons/yr

(Total from all Collection Systems) 10.04 tons/year

(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)

Emission Unit 003 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	003	Fluid Bed Dryer/Conveying System

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Fluid Bed Dryer/Conveying System, including following equipment:

- A. 26.9-MMBtu/hr fluid bed dryer exhausting to twin cyclones followed by Venturi scrubber (234-DC-096);
- B. Particulates collected in twin cyclones transferred by auger to dryer feed system;
- C. Dried product conveying, screening, milling, and elevating system served by fabric collector (234-DC-094);
- D. Bin vent dust collector (BLK-DC-003) with 1.5-hp exhaust fan (BLK-FN-003), shared with 1004223;
- E. Screw conveyor (BLK-SC-443) with 3-hp motor;
- F. 5 Mol process Silo No. 3 (BLD-BN-234); and
- G. Fabric collector (234-DC-094) with 75-hp blower.

OPERATIONAL CONDITIONS:

1. Particulate matter emissions from fabric collectors shall be no more than 0.02-gr/scf. (Rule 210.1)
2. Visible emissions from fabric collectors shall not exceed 7% opacity. (Rules 210.1 and 422 Subpart 000)
3. Sulfur compound emissions (as SO₂) shall not exceed 0.2% by volume (2000 ppmv). (Rule 407)
4. Each fabric collectors shall have operational differential pressure indicator. (Rule 210.1)
5. Scrubber shall have operational differential pressure indicator. (Rule 210.1)
6. Scrubber liquid supply (at inlet scrubber) shall have operational pressure indicator and flow meter. (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. 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)
9. Waste material from dust collector shall be collected and disposed of in manner preventing entrainment of particulate matter in atmosphere, i.e. returned to process. (Rule 210.1)
10. Adequate provisions for stack sampling of scrubber and fabric collector exhaust shall be maintained. (Rules 210.1 and 108.1)

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 Unit 003 Permit Conditions

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Venturi Scrubber Serving Dryer Exhaust (234-DC-096) (13,415 scfm)	0.02	gr/scf
	2.30	lb/hr
	55.20	lb/day
	10.07	ton/yr
Bin Vent Collector (234-DC-003) (5,000 scfm)	0.02	gr/scf
	0.86	lb/hr
	20.57	lb/day
	3.75	ton/yr
Fabric Collector (234-DC-094) (13,375 scfm)	0.02	gr/scf
	2.29	lb/hr
	55.03	lb/day
	10.04	ton/yr

From Natural Gas Combustion in Dryer:

<u>Oxides of Sulfur (SO_x as SO₂):</u>	0.02	lb/hr
	0.38	lb/day
	0.07	ton/yr
<u>Oxides of Nitrogen (NO_x as NO₂):</u>	2.64	lb/hr
	63.29	lb/day
	11.55	ton/yr
<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.15	lb/hr
	3.48	lb/day
	0.64	ton/yr
<u>Carbon Monoxide:</u>	2.22	lb/hr
	53.17	lb/day
	9.70	ton/yr

(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)

Emission Unit 005 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	005	Neobor Rotary Drying Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 5 Mol Rotary Dryer, including following equipment:

- A. One 62-MMBtu/hr rotary dryer (234-DR-016) with low NO_x burner and 75-hp dryer motor, 4 pre-cyclones, 4 cyclones (234-DC-078, 234-DC-079, 234-FN-318, and 234-F-319), 7.5-hp cyclone discharge screw (234-SC-217), bucket east elevator (234-EL-001) with 25-hp motor, screen (234-SN-141) with 3.5-hp motor, screw conveyor (234-SC-241) with 1.5-hp motor, and bridge belt conveyor (234-BC-190) with 5-hp motor.
- B. Venturi particulate scrubber (234-BD-051) and demister dust collector (234-DC-059) with fan (234-FN-059);
- C. NEOBOR COOLING SYSTEM with bucket elevator west (234-EL-123) with 25-hp motor, rotary screening (234-SN-001) with 3-hp motor, screw conveyor (234-SC-245) with 1-hp motor, enclosed mill (234-ML-001) and conveying system to Neobor Cooler system with air classifier system, 5 Mol transfer belt (234-BC-194) with 15-hp motor, cooler fan (234-FN-500) with 200-hp motor, screw conveyor (234-SC-500), elevator (234-EL-500) with 40-hp motor, discharge converter (234-99-500), fabric collector (234-DC-500) with 150-hp fan (234-FN-501);
- D. Sampler (234-SP-038) with fabric collector (234-DC-095) with 75-hp fan (234-FN-012) with 100-hp blower, screw conveyor (234-SC-028) with 40-hp motor, and trim screw conveyor (234-SC-283) with 25-hp motor;
- E. Pug mill (234-ML-001) on 5 Mol line;
- F. Six product storage silos (BLK-BN-235 through '240), bucket elevator (BLK-EL-036) with 10-hp motor from Bins 1 and 5 to shipping, bucket elevator (BKL-EL-124) with 10-hp motor, bucket elevators (BLK-EL-035 and '037) each with 40-hp motors, bucket elevator (BLK-EL-039) with 10-hp motor (EL-035, '037, and '039 shared with PTO 1004006) from bins 6 and 7, screw conveyors (BLK-SC-279, BLK-SC-292, and BLK-SC-004) with 25-hp, 2-hp, and 15-hp motors respectively, east and west screens BLK-SN-045 and BLK-SN-044 respectively, screw conveyors (BLK-SC-277 and '278) each with 7-hp motor, screw conveyor (BLK-SC-052) with 10-hp motor, Cyclone fabric collector with 60-hp motor (16,576-cfm), screw conveyor (BLK-SC-293) with 10-hp motor to dust bin, bucket elevator (BLK-EL-038) and screw conveyors (BLK-SC-279 and BLK-SC-193) each with 10-hp motors to Plant 5, belt conveyor (BLK-BC-135) with 10-hp motor to Fusing, and belt conveyor (BLK-BC-053) splits to storage silo; and
- G. 12x12 lump breakers and two automatic diverter valves served by existing fabric dust collector (234-DC-095).

OPERATIONAL CONDITIONS:

- 1. Rotary dryer shall be equipped with low NO_x burner specified in application under which this permit was issued. (Rule 210.1)
- 2. Fabric collector DC-101 shall only be used as control equipment for Fluid Bed Cooler FBC-101. (Rule 210.1)

Emission Unit 005 Permit Conditions

3. Fabric collector shall be equipped with operational pressure differential indicator. (Rule 210.1)
4. Fabric collector exhaust stack shall be equipped with adequate provisions facilitating collection of samples consistent with EPA test methods, i.e. capped sample port in accessible location of uniform flow. (Rule 108.1)
5. Fabric collector, related piping, and connections shall be maintained "dust-tight"; equipment shall be maintained so as not to allow visible greater than 5% opacity or fugitive emissions. (Rules 209 and 401)
6. Conveyors (SC-101, and SC-102) shall remain covered when operating. (Rule 210.1 BACT Requirement)
7. Visible emissions from any source shall not equal or exceed 5% opacity or Ringlemann No. 1 for more than three minutes in any one hour. (Rule 210.1 BACT Requirement)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 and 209)
9. Fabric collector DC-101 exhaust flow rate shall not exceed 40,000 actual cubic feet per minute (acfm). (Rule 210.1)
10. Particulate matter emission concentration shall not exceed 0.00108 gr/scf. (Rule 210.1 BACT Requirement)
11. Material removed from fabric collectors and other collected fines shall be returned to product stream or otherwise disposed of using method preventing entrainment in atmosphere. (Rules 210.1 BACT Requirement)
12. Fabric collector pulse-jet cleaning mechanism shall be provided with compressed air supply of adequate pressure and volume. (Rule 210.1)
13. Cooling Tower CT-101 water recirculation flow rate shall be less than 1,000 gallons per minute (gpm). (Rules 202 and 210.1)
14. Fluid Bed Cooler mass flow rate shall not exceed 182 tons per hour. (Rule 210.1)
15. 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 209)
16. 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)
17. Waste material from dust collector shall be collected and disposed of in manner preventing entrainment of particulate matter in atmosphere, i.e. returned to process. (Rule 209)
18. Maximum throughput from dryer shall not exceed 182 tons per hour. (Rule 210.1)

COMPLIANCE TESTING REQUIREMENTS:

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

Emission Unit 005 Permit Conditions

EMISSION LIMITS:

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

Particulate Matter (From Fabric Collectors and Venturi Scrubber):

Cyclone Fabric Collector (BLK-DC-109)	0.0142	gr/acf
(16,576-scfm)	2.01	lb/hr
	48.34	lb/day
	8.82	ton/yr

Fabric Collector for Sampling System:	0.01	gr/scf
(234-DC-095)	1.32	lb/hr
	31.68	lb/day
	5.78	ton/yr

Serving Fluid Bed Cooler:	0.00108	gr/scf
(234-DC-500)	0.37	lb/hr
(40,000-scfm)	8.89	lb/day
	1.62	ton/yr

Venturi Scrubber Serving Dryer Exhaust:	0.37	lb/hr
(234-DC-059)	8.86	lb/day
	1.62	ton/yr

From Natural Gas Combustion in Dryer:

<u>Oxides of Sulfur (SOx as SO₂):</u>	0.04	lb/hr
	0.88	lb/day
	0.16	ton/yr

<u>Oxides of Nitrogen (NOx as NO₂):</u>	0.52	lb/hr
	12.37	lb/day
	2.26	ton/yr

<u>Volatile Organic Compounds (VOC):</u>	0.36	lb/hr
(as defined in Rule 210.1)	8.61	lb/day
	1.59	ton/yr

<u>Carbon Monoxide:</u>	3.68	lb/hr
	88.26	lb/day
	16.11	ton/yr

(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 201.1, 209 and 210.1)

Emission Unit 006 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	006	5 Mol Screening

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 5 Mol Screening, including following equipment:

- A. Silo draw-off screw conveyors (SHP-SC-446 and SHP-SC-447) each with 20-hp motor, and silo draw-off belt conveyor (GRB-BC-004) with 20-hp motor;
- B. Elevator (BLK-EL124) with 40-hp motor and screw conveyors (BLK-SC-274, BLK-SC-440, and BLK-SC-284) with 20-hp, 3-hp, and 3-hp motors respectively;
- C. Rotex classifying screen assembly with 2 “optional” screens (BLK-SN-044 and ‘045) and screw conveyor (BLK-SC-004) with 15-hp motor.
- D. Elevators (BLK-EL-037 and BLK-EL-039) each with 40-hp motors, elevator (BLK-EL-035) with 25-hp motor, screw conveyors (BLK-SC-292, BLK-SC-004, BLK-SC-277, BLK-SC-052, and BLK-SC-422) with 2-hp, 15-hp, 7.5-hp, 10-hp, and 3-hp motors respectively;
- E. Fabric collectors (BLK-DC-085) with 50-hp exhaust fan (BLK-FN-085) serving bottom of three 5 Mol silos and truck load-out, fabric collector (BLK-DC-086) serving bottom of six 5 Mol silos and screen with 50-hp fan (BLK-FN-086), screw conveyors (BKL-SC-438, and ‘439) each with 7.5-hp motor, and screen conveyors (BLK-SC-435 and ‘436) each with 3-hp motor;
- F. Heil container with mini-spout load-out (BLK-SC-293) with 5-hp motor.

OPERATIONAL CONDITIONS:

1. Particulate matter emissions from fabric collectors shall be no more than 0.03-gr/scf. (Rule 210.1)
2. Visible emissions from fabric collectors shall not exceed 7% opacity. (Rules 210.1 and 422 Subpart 000)
3. Each fabric collectors shall have operational differential pressure indicator. (Rule 210.1)
4. Material collected in dust collectors shall be disposed of in manner preventing entrainment in theatmosphere. (Rule 209)
5. 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)
6. 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)
7. Waste material from dust collector shall be collected and disposed of in manner preventing entrainment of particulate matter in atmosphere, i.e. returned to process. (Rule 209)
8. Adequate provisions for stack sampling of fabric collector exhaust shall be maintained. (Rules 210.1 and 108.1)

Emission Unit 006 Permit Conditions

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with fabric collector 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 emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀):

Fabric Collector(BLK-DC-085):	0.03	gr/acf
(10,734 scfm)	2.76	lb/hr
	66.24	lb/day
	12.09	ton/yr

Fabric Collector (BLK-DC-086):	0.03	gr/acf
(7,800 scfm)	2.01	lb/hr
	48.14	lb/day
	8.79	ton/yr

(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 201.1, 209 and 210.1)

Emission Unit 007 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	007	5 Mol High Speed Conveying

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 5 Mol High Speed Conveying, including following equipment:

- A. 5 Mol storage silos draw-off equipment;
- B. 36 in. wide belt conveyor (SHP-BC-003, 004); and
- C. Fabric collector with exhaust rate of 6798 cfm (SHP-DC-118, shared with permit 1004083).

OPERATIONAL CONDITIONS:

- 1. Visible emissions from any single emission point shall be less than 20% opacity. (Rule 401)
- 2. Collectors shall have operational differential pressure indicators. (Rule 209)
- 3. All exhaust ducts shall be connected to appropriate collection equipment. (Rule 210.1)
- 4. All collection equipment shall be strictly maintained. (Rule 210.1)

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)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector(SHP-DC-118):	0.03	gr/acf
	1.75	lb/hr
	41.95	lb/day
	7.66	ton/yr

(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 201.1, 209 and 210.1)

Emission Unit 008 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	008	5 Mol Railcar Loadout

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 5 Mol Railcar Loadout, including following equipment:

- A. Two surge bins (SHP-BN-433 AND 434) and screw conveyor (SHP-SC-364);
- B. Three coaxial loadout spouts (SHP-99-351, 352, 353);
- C. Four retractable dust hoods (SHP-99-355, SHP-99-356, SHP-99-357, SHP-99-358);
- D. Fabric collector (SHP-DC-119) with 100-hp exhaust fan exhausting at 30,750 cfm (shared with permit 1004071, '303);
- E. Container with mini spout (SHP-99-701); and
- F. Three, 5-hp, screens (SHP-SN-002, SHP-SN-003, AND SHP-SN-004), dust-tight.

OPERATIONAL CONDITIONS:

- 1. Visible emissions from fabric collector SHP-DC-119 shall not exceed 5% opacity or Ringelmann ¼ for not more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
- 2. Fugitive emissions from equipment, such as conveyor transfer points shall not exceed 10% opacity. (Rule 422 Subpart OOO)
- 3. Fabric collectors shall have operational differential pressure indicators. (Rule 209)
- 4. All exhaust ducts shall be connected to appropriate collection equipment. (Rule 210.1)
- 5. Fabric dust collector shall be in operation when associated equipment is operated. (Rule 210.1)
- 6. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 7. Process weight rate shall not exceed 400 tons per hour without prior District approval. (Rule 210.1)
- 8. Equipment shall be maintained according to the manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1)
- 9. Fabric collector exhaust stack shall be equipped with provisions for collection of pollutant samples in manner consistent with U. S. EPA test methods. (Rule 210.1)
- 10. Owner/operator shall comply with applicable monitoring, testing, and record keeping requirements of 40 CFR Part 60 Subpart OOO. (Rule 422 Subpart OOO)
- 11. 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 a readily available format and maintained for a period of at least five years. (Rule 210.1)
- 12. No emission resulting from the 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)

Emission Unit 008 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)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector (SHP-DC-119):	0.01	gr/acf(BACT Requirement)
(@ 30,750 scfm)	2.64	lb/hr
*shared with ATC No.'s 1004071D	63.26	lb/day
	11.54	ton/yr

Fugitive:	0.02	lb/hr
	0.53	lb/day
	0.10	ton/yr

(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 documenting 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 009 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	009	5 Mol Packing Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 5 Mol Packing Operation, including following equipment:

- A. Pulse jet 4 compartment fabric collector, 320 bags, with 100-hp exhaust fan (PPK-DC-161), serving the packing feed transfer system;
- B. Fabric collector (3200 CFM) (PPK-DC-500), with 15-hp exhaust fan (PPK-FN-500) serving the packer spouts and IBC retractable spout;
- C. 2 - Screeners, 5hp, PPK-SN-500, SPL-L2-500;
- D. 1 - 367 ft³ supply bin, PPK-BN-055;
- E. 1 - 30 ton bin, P9P-BN-001;
- F. 2 - 500 ft³ 1hp spill bins with retractable loadout spouts;
- G. 6 - Screw conveyors, (PPK-SC-235), (PPK-SC-448), (PPK-SC-059), (PPK-SC-460), (PPK-SC-461), (PPK-SC-463), 72.5-hp total;
- H. 2 - Belt conveyors, (PPK-BC-060), (PPK-BC-058), 6-hp total;
- I. 1 - Belt conveyor, PPK-BC-500 5-hp;
- J. 1 - 24 inch lift, bucket elevator, 3-hp (PPK-EL-143);
- K. IBC loading station with retractable loading spout, SPL-99-500; and
- L. 2 - 2.2-hp Packers (PPK-PK-006, PPK-PK-007), each with 2 ton feed bin and filling spout with 21-hp dust collector (PPK-DC-018) and screw conveyor (PPK-SC-059) with 2-hp motor.

OPERATIONAL CONDITIONS:

1. Fabric collector shall be quipped with operational pressure differential indicator. (Rule 210.1)
2. Fabric collector exhaust stack shall be equipped with adequate provisions facilitating collection of samples consistent with EPA test methods, i.e. capped sample port in accessible location of uniform flow. (Rule 108.1)
3. Fabric collector, related piping, and connections shall be maintained “dust-tight”; equipment shall be maintained so as not to allow visible greater than 5% opacity or fugitive emissions. (Rules 209 and 401)
4. Screw conveyors and belt conveyor shall be covered while operating. (Rule 210.1 BACT Requirement)
5. Particulate matter emission concentration at collector stack outlet shall not exceed 0.01 gr/scf. (Rule 210.1 BACT Requirement).
6. Material removed from fabric collectors and other collected fines shall be returned to product stream or otherwise disposed of using method preventing entrainment in atmosphere, and visible emissions not to exceed 5% opacity. (Rule 210.1 BACT Requirement)
7. Fabric collector pulse-jet cleaning mechanism shall be provided with compressed air supply of adequate pressure and volume. (Rule 210.1)
8. Packers shall be operated with no visible emissions. (Rule 210.1)

Emission Unit 009 Permit Conditions

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 Sec 41700)
10. Equipment breakdowns resulting in non-compliance with any emission limitations shall be reported pursuant to Rules 111 and 422. (Rules 111 and 422)
11. 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)

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 45 days of District request. (Rule 108.1)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

0.26 lb/hr
6.17 lb/day
1.13 tons/yr

(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 documenting 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 010 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	010	5 Mol Furnace Feed

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 5 Mol Furnace Feed, including following equipment:

- A. Four compartment fabric collector (ABX-DC-163) with four 1.75-hp motors and including exhaust fan (ABX-FN-001) with 30-hp motor (shared with PTOs 1004019 and 1004032);
- B. Fabric collector (ABX-DC-166) with two 0.33-hp motors and including exhaust fan (ABA-FN-002) with 10-hp motor (shared with 1004019); and
- C. Boric acid railcar receiving pit with covered auger (ABX-BN-015) ventilated to fabric collector (ABX-DC-163) (shared with permits 1004019 and 1004032).

OPERATIONAL CONDITION:

Visible emissions from any single emission point shall be less than 20% opacity. (Rule 401)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector (ABX-DC-163):	0.01 gr/acf
	14.63 lb/day

(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 documenting 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

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	012	10 Mol Dryer #2

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 10 Mol Dryer #2, including following equipment:

- A. One natural gas/fuel oil tray type 5-hp dryer 234-DR-002, including: 15-hp fan, 234-FN-002; 15-hp dryer fan, 234-FN-002; 15-hp dryer fan, 234-FN-142; 5-hp atomizer fan, 234-FN-131; 10-hp combustion fan, 234-FN-138, and 2-hp screw conveyer, 234-SC-183;
- B. Screw conveyer, 234-SC-183;
- C. 5-hp high roller belt conveyor, 234-BC-300 (shared with PTO 1004011 and 1004013) 2-hp screw conveyers 234-SC-013 and 234-SC-011;
- D. 3-hp, 800 cfm, fabric collector, 234-DC-300, equipped with 149 ft² of polyester fabric and reverse pulse jet cleaning mechanism (shared with PTO 1004011 and 1004013) 2-hp screw conveyers (234-SC-013, 234-SC-011 and 234-SC-183);
- E. 7.5-hp bucket elevator, 234-EL-082 (shared with 1004011, 1004013, 1004014 and 1004015) 5-hp screw conveyers 234-SC-300 and 234-SC-015; 2-hp screw conveyers 234-SC-303, 234-SC-304 and 234-SC-183); and
- F. One product cooler 234-CO-004 with 3-hp fabric collector 234-DC-301 (shared with PTOs 1004011, '013, '014, and '015, 5-hp belt conveyor 234-BC-301 and diverter gate 234-DG-300).

OPERATIONAL CONDITIONS:

1. Particulate matter emissions from any single source operation shall be no more than 0.1-gr/scf. (Rule 404.1)
2. Visible emissions from any single emission point shall be less than 20% opacity. (Rule 401)
3. Maximum process weight - 30,000 lb/hour. (Rule 210.1)
4. Weight feeder shall be operational during dryer use. (Rule 209)
5. Collectors shall have operational differential pressure indicator. (Rule 209)
6. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 209)
7. Storage facilities shall meet emission standards (see Operational Condition 1, above). (Rule 401)
8. Operation of this equipment shall be conducted in compliance with all data and specifications submitted under which this permit is issued. (Rule 210.1)

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 45 days of District request. (Rule 108.1)

Emission Unit 013 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	013	10 Mol Dryer #3

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 10 Mol Dryer #3, including following equipment:

- A. One natural gas/fuel oil tray type 5-hp dryer, 234-DR-003, including: 15-hp fan, 234-FN-003; 15-hp dryer fan, 234-FN-144; 5-hp atomizer fan, 234-FN-195; 10-hp combustion fan, 234-FN-140; and 2-hp screw conveyor, 234-SC-013;
- B. 2-hp screw conveyor, 234-SC-013;
- C. 5-hp high roller belt conveyor, 234-BC-300 (shared with PTO 1004011 and 1004012) 2-hp screw conveyers 234-SC-183 and 234-SC-011;
- D. 3-hp, 800 cfm fabric collector, 234-DC-300, equipped with 149 ft² of polyester fabric and reverse pulse jet cleaning mechanism (shared with PTOs 011 and 012) 2-hp screw conveyers 234-SC-013, 234-SC-011 and 234-SC-183;
- E. 7.5-hp bucket elevator, 234-EL-082 (shared with PTOs 011, 012, 014 and 015); 5-hp screw conveyers 234-SC-300 and 234-SC-015; 2-hp screw conveyers 234-SC-303, 234-SC-304 and 234-SC-183; and
- F. One product cooler with 3-hp fabric collector 234-DC-301 (shared with PTOs 011, 012, 014, and 015 5-hp belt conveyor 234-BC-301 and diverter gate 234-DG-300).

OPERATIONAL CONDITIONS:

1. Particulate matter emissions from any single source operation shall be no more than 0.1-gr/scf. (Rule 404.1)
2. Visible emissions from any single emission point shall be less than 20% opacity. (Rule 401)
3. Maximum process weight - 30,000 lb/hour. (Rule 210.1)
4. Weight feeder shall be operational during dryer use. (Rule 209)
5. Collectors shall have operational differential pressure indicator. (Rule 209)
6. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 209)
7. Storage facilities shall meet emission standards (see Operational Condition 1, above). (Rule 401)
8. Operation of this equipment shall be conducted in compliance with all data and specifications submitted under which this permit is issued. (Rule 210.1)

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 45 days of District request. (Rule 108.1)

Emission Unit 014 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	014	10 Mol Dryer #4

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 10 Mol Dryer #4, including following equipment:

- A. One natural gas/fuel oil tray type 5-hp dryer, 234-DR-004, including: 15-hp fan, 234-FN-004; 15-hp dryer fan, 234-FN-436; 5-hp atomizer fan, 234-FN-162; 10-hp combustion fan, 234-FN-154; and 2-hp screw conveyer, 234-SC-303;
- B. 2-hp screw conveyer, 234-SC-303;
- C. 5-hp high roller belt conveyor, 234-SC-015 (shared with PTO 1005015) 2-hp screw conveyer 234-SC-304;
- D. 7.5-hp bucket elevator, 234-EL-082 (shared with PTOs 1004011, 1004012, 1004013 and 1005015) 5-hp screw conveyers 234-SC-300 and 234-SC-015; 2-hp screw conveyers 234-SC-303, 234-SC-304 and 234-SC-183; and
- E. One product cooler 234-CO-004 with 3-hp fabric collector 234-DC-301 (shared with PTOs 1004011, '012, '013, and '015)
- F. 5-hp belt conveyer 234-BC-301 and diverter gate 234-DG-300.

OPERATIONAL CONDITIONS:

1. Particulate matter emissions from any single source operation shall be no more than 0.1-gr/scf. (Rule 404.1)
2. Visible emissions from any single emission point shall be less than 20% opacity. (Rules 401)
3. Maximum process weight - 30,000 lb/hour. (Rule 210.1)
4. Weight feeder shall be operational during dryer use. (Rule 209)
5. Collectors shall have operational differential pressure indicator. (Rule 209)
6. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 209)
7. Storage facilities shall meet emission standards (see Operational Condition 1, above). (Rule 401)
8. Operation of this equipment shall be conducted in compliance with all data and specifications submitted under which this permit is issued. (Rule 210.1)

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 45 days of District request. (Rule 108.1)

Emission Unit 015 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	015	10 Mol Dryer #5

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 10 Mol Dryer #5, including following equipment:

- A. One natural gas/fuel oil tray type 5-hp dryer, 234-DR-005, including: 15-hp fan, 234-FN-005; 15-hp dryer fan, 234-FN-407; 5-hp atomizer fan, 234 FN-160; 10-hp combustion fan, 234-FN-458; and 2-hp screw conveyer, 234-SC-303.
- B. 2-hp screw conveyer, 234-SC-303;
- C. 5-hp belt conveyer, 234-SC-015 (shared with PTOs 015) 2-hp screw conveyer 234-SC-304;
- D. 7.5-hp bucket elevator, 234-DL-082 (shared with PTOs 011, 1004012, 1004013 and 1004014) 5-hp screw conveyers 234-SC-300 and 234-SC015; 2-hp screw conveyers 234-SC-303, 234-SC-304 and 234-SC-183; and
- E. One product cooler 234-CO-004 with 3-hp fabric collector 234-DC-301 (shared with PTOs 011, 1004012, 1004013, and 1004014) 5-hp belt conveyer 234-BC-301 and diverter gate 234-DG-300.

OPERATIONAL CONDITIONS:

1. Particulate matter emissions from any single source operation shall be no more than 0.1-gr/scf . (Rule 404.1)
2. Visible emissions from any single emission point shall be less than 20% opacity. (Rules 401)
3. Maximum process weight - 30,000 lb/hour. (Rule 210.1)
4. Weight feeder shall be operational during dryer use. (Rule 209)
5. Collectors shall have operational differential pressure indicator. (Rule 209)
6. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 209)
7. Storage facilities shall meet emission standards (see Operational Condition 1, above). (Rule 401)
8. Operation of this equipment shall be conducted in compliance with all data and specifications submitted under which this permit is issued. (Rule 210.1)

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 45 days of District request. (Rule 108.1)

Emission Unit 016 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	016	10 Mol Crushing/Screening Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 10 Mol Crushing/Screening Operation, including following equipment:

- A. Belt conveyor 234-BC-301 served by dust collector 234-DC-301;
- B. Belt conveyor 234-BC-302 with 5-hp motor served by dust collector 234-DC-302;
- C. Belt conveyor 234-BC-303 with 5-hp motor served by dust collector 234-DC-306;
- D. Bucket elevator (234-EL-117) with 7.5 hp motor;
- E. Two cage mills (TMS-ML-002 and TMS-ML-003) each with two 150-hp motor and discharges (TMS-SC-151 and TMS-SC-396) served by dust collector, TMS-DC-158 with 75-hp fan;
- F. Two scalper screens (TMS-SN-002 and TMS-SN-166) each with 2.5-hp motor;
- G. Five screens (234-SN-001, ‘-008, ‘-009, ‘-016, and ‘-655) served by five screw conveyors (PPK-SC-412, ‘-413, ‘-414, ‘-415, and ‘-416);
- H. Two bucket elevators (PPK-EL-026 and PPK-EL-044) with 25-hp motors served by dust collector (TMS-DC-158);
- I. Two screw conveyors (234-SC-030 and 234-SC-040) served by dust collector (TMS-DC-158);
- J. Six product bins (TMS-BN-035, ‘-036, ‘-037, ‘-038, ‘-039, and ‘-040) served by dust collector (TMS-DC-158);
- K. Two screw conveyors (TMS-SC-303 and TMS-SC-304) each with 1-hp motor, two belt conveyors (PPK-BC-036 and ‘-037) each with 7.5-hp motor, and two belt conveyors (PPK-BC-038 and ‘-039) each with 15-hp motor;
- L. Belt conveyor (234-BC-306) (oversize) served by dust collector (TMS-DC-158);
- M. Belt conveyor 234-BC-305 (return belt) served by dust collectors (234-DC-304 and 234-DC-305) each with 3-hp motor and including fans (234-FN-304 and 234-FN-305) each with 15-hp motor.
- N. Belt conveyor 234-BC-304 (recycle) served by dust collector 234-DC-303 with 3-hp motor, and one feed PPK-FD-417;
- O. Emergency use screw conveyor;
- P. Two cage mills (PPK-ML-010 and PPK-ML-012) each with 3-hp motor,
- Q. Belt conveyor (BLK-BC-062) with 10-hp motor; and
- R. Two bins (SHP-BN-700 and SHP-BN-701)
- S. 3-hp, 800 cfm fabric collector 234-DC-301 equipped with 149 ft² of polyester and reverse pulsejet cleaning mechanism;
- T. 3-hp, 800 cfm fabric collector 234-DC-302 equipped with 149 ft² of polyester and reverse pulsejet cleaning mechanism;
- U. 3-hp, 800 cfm fabric collector 234-DC-303 equipped with 149 ft² of polyester and reverse pulsejet cleaning mechanism;
- V. 3-hp, 800 cfm fabric collector 234-DC-304 equipped with 149 ft² of polyester and reverse pulsejet cleaning mechanism; and
- W. 3-hp, 800 cfm fabric collector 234-DC-305 equipped with 149 ft² of polyester and reverse pulsejet cleaning mechanism.

Emission Unit 016 Permit Conditions

OPERATIONAL CONDITIONS:

1. Particulate matter emissions from any single source operation shall be no more than 0.1-gr/scf . (Rule 404.1)
2. Visible emissions from any single emission point shall be less than 20% opacity. (Rules 401)
3. Dust collector shall be equipped with operational pressure differential indicator. (Rule 210.1)
4. All ducting, piping, and connections shall be dust-tight. (Rule 210.1)
5. All dust-tight equipment shall be maintained so as not to allow visible or fugitive emissions. Visible emissions from transfer points and any source shall be less than 20% opacity. (Rules 209 and 401)
6. Fabric collector shall have provisions for stack sampling consistent with U. S. EPA test methods. (Rule 108.1)
7. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
8. Equipment shall be maintained in accordance with manufacturer's recommendations. (Rule 210.1)
9. There shall be no odors detectable at or beyond property boundary. (Rule 419)
10. 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)
11. Operation of this equipment shall be conducted in compliance with all data and specifications submitted under which this permit is issued. (Rule 210.1)

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 45 days of District request. (Rule 108.1)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector (TMS-DC-158):	0.95	lb/hr
	22.80	lb/day
	4.16	ton/yr

(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 documenting 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 017 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	017	10 Mol Railcar Loadout

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 10 Mol Railcar Loadout, including following equipment:

- A. Classified bins silo draw-off equipment;
- B. Six railcar load-out chute with dust pickups and fabric shrouds to cover hatch (TMS-99-006, TMS-99-007); and
- C. Fabric collector (TMS-DC-081) with 15-hp exhaust fan.

OPERATIONAL CONDITIONS:

- 1. Visible emissions from any single emission point shall be less than 20% opacity. (Rule 401)
- 2. Only two load-out stations to operate at any time. (Rule 209)
- 3. Air pickups at unused load-out stations shall be closed. (Rule 209)
- 4. Fabric shrouds shall be carefully positioned and strictly maintained to prevent emissions at railcar hatch. (Rule 210.1)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector (TMS-DC-081):	0.03	gr/acf
	0.50	lb/hr
	12.00	lb/day
	2.1	ton/yr

(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 documenting 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 018 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	018	10 Mol Packing

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 10 Mol Packing, including following equipment:

- A. Three compartment jet fabric collector, 240 bags, with 75-hp exhaust fan, fabric collector PPK-FN-162, serving the feed transfer system (PPK-DC-162);
- B. Fabric collector (3200 CFM), with 15-hp exhaust fan (PPK-DC-100), serving the packer spouts and IBC retractable spout;
- C. Ventilation ducts and hoods;
- D. 2 - 5-hp screeners, Model 581D, PPK-SN-100, SPL-SN-100;
- E. 1 - 367 ft³ supply bin, PPK-BN-046;
- F. 1 - 25 ton bin, PPK-BN-001;
- G. 2 - 2.2-hp packers (PPK-BN-008, PPK-PK-009), each with 2 ton feed bin and filling spout;
- H. 1 - 1-hp IBC loading station with retractable loading spout (SPL-99-100);
- I. 3 - 500 ft³ spill bins, each with retractable load out spout SPL-BN-001, 100, 500;
- J. 4 - screw conveyors, (PPK-SC-465), (PPK-SC-468), (PPK-SC-469), (PPK-SC-470), 48-hp total;
- K. 1 - screw conveyor, PPK-SC-100, 1-hp;
- L. 2 - belt conveyors, PPK-BC-038, PPK-BC-039, 10-hp total;
- M. 2 - belt conveyors, PPK-BC-100, PPK-BC-101, 10-hp total;
- N. 1 - 27 1/3' lift bucket elevator, 3-hp (PPK-EL-145);
- O. Fabric filters air systems, Model 169-10, fabric collector MIL-DC-021, 320 bags, 2211 ft² with 20-hp exhaust fan, serving powder mill and screw conveyors MIL-SC-069, MIL-SC 067;
- P. 1 - 460 ft³ supply bin, MIL-BN-048;
- Q. 2 - rotary air lock feeders, (MIL-FD-186) 4-hp total;
- R. 2 - mills, 100-hp total, MIL-ML-013, MIL-ML-014;
- S. 2 - blowers, 120-hp total, MIL-DC-042, MIL-DC-043; and
- T. 2 - cyclone separators.

OPERATIONAL CONDITIONS:

- 1. Fabric collector shall be equipped with operational pressure differential indicator. (Rule 210.1)
- 2. Fabric collector exhaust stack shall be equipped with adequate provisions facilitating collection of samples consistent with EPA test methods, i.e. capped sample port in accessible location of uniform flow. (Rule 108.1)
- 3. Fabric collector, related piping, and connections shall be maintained “dust-tight”, equipment shall be maintained so as not to allow visible greater than 5% opacity or fugitive emissions. (Rules 209 and 401)
- 4. Screw conveyors and belt conveyor shall be covered while operating. (Rule 210.1 BACT Requirement)

Emission Unit 018 Permit Conditions

5. Visible emissions from any emission source shall not exceed 5% opacity. (Rule 210.1 BACT Requirement)
6. Particulate matter emission concentration shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement)
7. Material removed from fabric collectors and other collected fines shall be returned to product stream or otherwise disposed of using method preventing entrainment in atmosphere, and visible emissions not to exceed 5% opacity. (Rule 210.1 BACT Requirement)
8. Fabric collector pulse-jet cleaning mechanism shall be provided with compressed air supply of adequate pressure and volume. (Rule 210.1)
9. Packers shall be operated with no visible emissions. (Rule 210.1)
10. 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)
11. Equipment breakdowns resulting in non-compliance with any emission limitations shall be reported pursuant to Rules 111 and 422. (Rules 111 and 422)
12. 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)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 45 days of District request.

EMISSION LIMITS:

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

Particulate Matter 10 microns (PM10):

0.26 lb/hr
6.17 lb/day
1.13 tons/yr

(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 documenting 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 019 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	019	10 Mol Furnace Feed

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 10 Mol Furnace Feed, including following equipment:

- A. Fabric collector (ABX-DC-163) with 30-hp exhaust fan, delivering 7119-cfm serving North Feed Bridge Area I with four 1.75-hp motors with 30-hp exhaust fan, discharge from fabric collector screw conveyor (ABX-SC-478) with 3-hp motor, and dust transfer to center belt screw conveyor (ABX-SC-479) with 2-hp motor;
- B. Fabric collector (ABX-DC-166) with 10-hp exhaust fan (ABX-FN-002), delivering 2700-cfm serving North Feed Bridge Area II and two 0.33-hp motors and;
- C. 9 in. diameter screw conveyors HC 1 & HC 3-(2) 3-hp motors each, serving collector returning dust to existing furnace feed conveyors (#11039 and #11207);
- D. Dust pick-ups and ventilation ducting serving six 18 in. wide belt conveyors, 3 existing 17 in. wide and one 12 in. wide covered screw conveyors;
- E. Material conveyors and elevators with fabric collector (shared with PTO's 1004011 thru '015); and
- F. Boric acid railcar receiving pit with covered auger (ABX-BN-015) ventilated to fabric collector (ABX-DC-163) (shared with PTO's 1004019 and 1004032).

OPERATIONAL CONDITIONS:

1. Particulate matter emissions from any single source operation shall be no more than 0.1-gr/scf. (Rule 404.1)
2. Visible emissions from any single emission point shall be less than 20% opacity. (Rule 401)
3. Collectors shall have operational manometers. (Rule 209)
4. Material collected in dust control system shall be returned to process in manner preventing emissions. (Rule 210.1)
5. Dust control systems shall be operated whenever 5 Mol furnace feed operation equipment is operated. (Rule 209)

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 45 days of District request. (Rule 108.1)

EMISSION LIMITS:

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

Emission Unit 019 Permit Conditions

Particulate Matter (PM₁₀):

Fabric Collector (ABX-DC-163):	0.01	gr/acf
	0.61	lb/hr
	14.60	lb/day

(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 documenting 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 027 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	027	Line 7 Fusing

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Line 7 Fusing, including following equipment:

- A. East west feed belt conveyor (ABX-BC-120) with 3-hp motor, north west feed from east west belt conveyor (ABX-BC-170) with 3-hp motor, 75 ton capacity feed receiving bin (ABX-BN-310) furnace feed weigh belt (ABX-WD-053) with 3-hp motor, 5 ton capacity furnace feed bin (ABX-BN-311) furnace feed to elevator screw conveyor (ABX-SC-221) with 10-hp motor;
- B. Recycle screw conveyors to furnace feed #1 (ABX-SC-225) and feed #2 (ABX-SC-226)
- C. Three compartment dust collector, DC-1 (ABX-DC-169) with associated ductwork and 30-hp exhaust fan F-1 (ABX-FN-478) serving furnace feed equipment, exhaust fan 5800-cfm with 3 x 0.25-hp motors, dust recycle screw conveyor (ABX-SC-195) with 10-hp motor;
- D. One bucket elevator (ABX-EL-106) with 7.5-hp motor ventilated to fabric collector;
- E. South furnace feed screw conveyor (ABX-SC-222) with 25-hp motor, west furnace feed screw conveyor (ABX-SC-223) with 20-hp motor, north furnace feed with 20-hp motor (ABX-SC-224);
- F. Recycle screw conveyor to furnace feed #1 (ABX-SC-225), feed #2 (ABX-SC-226), ten enclosed furnace feed systems, including 10 vibrating feeders (ABX-SC-101 through 110) and 10 under feeders (ABX-SC-111 through 120); and
- G. 90-MMBtu/hr fusing furnace (ABX-FC-007) with adjustable burner angles with combustion air blower (ABX-FN-285) with 150-hp motor;
- H. 22,000 cfm Venturi scrubber (ABX-FN-129), including 1500-hp scrubber fan (ABX-FN-057); and
- I. Temporary curing burners that will not exceed 4 Low-NOx burners, with a burner rating of 10 MMBTU/hr each (40 MMBTU/hr total).

OPERATIONAL CONDITIONS:

1. Fabric collector and wet scrubber each shall be equipped with operational differential pressure indicator. (Rule 210.1)
2. Fabric collector shall all be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
3. Scrubber shall be equipped with liquid volumetric flow indicators. (Rule 210.1)
4. Particulate matter emissions from wet scrubber exhaust shall not exceed 20% opacity (1 Ringelmann), excluding water vapor. (Rule 210.1 BACT Requirement)
5. Visible emissions from fabric collector/wet scrubber shall not exceed 20% opacity (1 Ringelmann), excluding water vapor. (Rule 210.1 BACT Requirement)
6. Fabric dust collector volumetric exhaust flow rate shall not exceed 5,800 standard cubic feet per minute (scfm). (Rule 210.1)
7. Fabric dust collector and shall be in operation when associated 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. Maximum allowable process weight - 41,000 lb/hour. (Rule 401)
10. All conveyors transporting dried material shall be covered, be leak-tight, have no visible emissions. (Rule 210.1)

Emission Unit 027 Permit Conditions

11. Material collected in fabric dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
12. Dryer burners shall be fired exclusively with public utility commission regulated quality natural gas. (Rule 210.1 BACT Requirement)
13. No more than 788.4-MMscf/year of natural gas shall be burned as fuel. (Rule 210.1)
14. During Cold Start, if refractory repair has been completed, refractory curing may be completed with temporary curing burners.
 - a) Temporary curing burners will not exceed 4 Low-NOx burners, with a burner rating of 10-MMBTU/hr each (40-MMBTU/hr total).
 - b) Temporary burners will use existing furnace natural gas supply only.
 - c) During the refractory curing phase of a Cold Start, no product will be introduced to the furnace.
 - d) Refractory curing will not exceed 400 hours per year.
15. Operator shall maintain annual records of fuel use. (Rule 210.1)
16. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.)
17. 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)
18. Emission from use of this equipment shall not 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)
19. Furnace shall be tested biennially according to the following test methods: (Rule 108.1 and 210.1)
 - a) Fuel HHV shall be certified by third party fuel supplier or determined by:
 - 1) ASTM D 240-87 or D 4809 for liquid fuels; and
 - 2) ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels.
 - b) Oxides of nitrogen (ppmv) - EPA Method 7E, or CARB Method 100;
 - c) Carbon monoxide (ppmv) - EPA Method 10, or CARB Method 100;
 - d) Stack gas oxygen - EPA Method 3 or 3A, or CARB Method 100;
 - e) NOx emission rate (heat input basis) - EPA Method 19, or CARB Method 100 and data from fuel flow meter;
 - f) Stack gas velocity - EPA Method 2;
 - g) Particulate matter – EPA Method 5 and
 - h) Stack gas moisture content - EPA Method 4.

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. (Rules 108.1 and 210.1)

Emission Unit 027 Permit Conditions

EMISSION LIMITS:

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

Emissions from Scrubber:

<u>Oxides of Nitrogen (NOx):</u>	9.00	lb/hr
	216.00	lb/day
	39.42	ton/yr

<u>Oxides of Sulfur (SOx):</u>	0.05	lb/hr
	1.29	lb/day
	0.24	ton/yr

<u>Particulate Matter (PM₁₀):</u>	28.90	lb/hr
	693.60	lb/day
	126.58	ton/yr

<u>Carbon Monoxide (CO):</u>	7.56	lb/hr
	181.40	lb/day
	33.11	ton/yr

<u>Volatile Organic Compounds (VOC):</u>	0.50	lb/hr
	11.88	lb/day
	2.17	ton/yr

Emissions from Dust Collector:

<u>Particulate Matter (PM₁₀):</u>	0.51	lb/hr
	12.31	lb/day
	2.25	ton/yr

Emissions from Refractory Curing:

<u>Oxides of Nitrogen (NOx):</u>	4.00	lb/hr
	96.00	lb/day
	0.80	ton/yr

<u>Oxides of Sulfur (SOx):</u>	0.02	lb/hr
	0.58	lb/day
	0.00	ton/yr

<u>Particulate Matter (PM₁₀):</u>	0.23	lb/hr
	5.47	lb/day
	0.05	ton/yr

<u>Carbon Monoxide (CO):</u>	3.36	lb/hr
	80.64	lb/day
	0.67	ton/yr

<u>Volatile Organic Compounds (VOC):</u>	0.50	lb/hr
	11.88	lb/day
	2.17	ton/yr

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

Emission Unit 027 Permit Conditions

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 201.1, 209 and 210.1)

Emission Unit 028 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1004	028	Line 7 Cooling/Milling/Screening

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Line 7 Cooling/Milling/Screening, including following equipment:

- A. Fully enclosed chill roll (ABX-DR-014 and '015), speed reducer (ABX-SR-072) with 15-hp motor, pan conveyor (ABX-CM-061), sheet breaker (ABX-ML-039) with 7.5-hp motor, vibrating cooling conveyor (ABX-CM-061) with 7.5-hp motor ventilated to multi-cyclone dust collector (ABX-DC-084); speed reducer (ABX-SR-065) with 15-hp motor, lump breaker (ABX-ML-040) with 15-hp motor, and spare mill for line 7 or 26 (ABX-ML-031);
- B. Two compartment multi-cyclone (ABX-DC-084), associated ductwork with two 150-hp exhaust fans (ABX-FN-289 and '-290) shared with line 6, and inlet air plenum divider plat removed to allow line 6 compartment to act as backup to line compartment, west screw conveyors (ABX-SC-491 and '-492) and east screw conveyors (ABX-SC-227 and '-228);
- C. Mill bin elevator (ABX-EL-107) with 10-hp motor, hammer mill bin feed belt conveyor (ABX-BC-171) with 2-hp motor, and hammer mill feed bin (ABX-BN-312);
- D. South and north hammer mill feeders (ABX-FD-001 and -002), and north and south hammer mills (ABX-ML-045 and '-47);
- E. Hammer mill discharge bunker bin (ABX-BN-304);
- F. Four compartment fabric collector (ABX-DC-083) and associated ductwork with 150-hp exhaust fan (ABX-FN-291), fabric collector screw conveyor (ABX-SC-477) with 5-hp motor, screen to Superbag (ABX-SN-004) with 2.5-hp motor, and dust belt conveyor (ABX-BC-306) with 10-hp motor;
- G. Screen bin feed elevator (ABX-EL-108) with 7.5-hp motor, screen bin feed belt conveyor (ABX-BC-172) with 3-hp motor, and screen bin (ABX-BN-313);
- H. No. 1 and No. 2 feeders (ABX-FD-003 and -004) and No. 1 and No. 2 screens (ABX-SN-002 and '-003);
- I. Oversized recycle belt conveyor (ABX-DC-173) with 3-hp motor, 12 mesh product belt conveyor (ABX-BC-175) with 3-hp motor, 12 mesh product weigh belt (ABX-WD-054) with 0.75-hp motor, scale (ABX-WD-052), 12 mesh product elevator (ABX-EL-109) with 7.5-hp motor, 12 mesh magnetic separator (ABX-MG-077) with 1.5-hp motor, 12 mesh sampler (ABX-SP-052), lower west product belt conveyor (ABX-BC-043) with 7.5-hp motor, north upper west product belt conveyor (ABX-BC-133), with 5-hp motor, south upper west product belt conveyor (ABX-BC-134) with 5-hp motor; 10.5 cubic foot surge bin (APX-HP-300);
- J. Three-compartment fabric collector (ABX-DC-170) with three 0.33-hp motors, associated ductwork and including a 60-hp exhaust fan delivering 11,894 cfm (ABX-FN-479); and
- K. Special mesh product belt conveyor (ABX-BC-176) with 5-hp motor, special mesh product with belt (ABX-WD-055) with 0.75-hp motor, special mesh product elevator (ABX-EL-110) with 5-hp motor, special mesh magnetic separator (ABX-MG-079) with 1.5-hp motor, and special mesh sampler (ABX-SP-045).

Emission Unit 028 Permit Conditions

OPERATIONAL CONDITIONS:

1. Screens shall be fully enclosed. (Rule 209)
2. Existing dust collector shall serve discharge point of each screen and function whenever screens are in operation. (Rule 209)
3. Dust collectors shall be equipped with operational pressure differential indicators. (Rule 209)
4. Opacity of stack emissions shall be less than 7%. Stack emissions shall not contain particulate matter in excess of 0.02-gr/dscf. (Rule 422)
5. Fugitive emissions from equipment, such as conveyor transfer points shall be less than 10% opacity. (Rule 422)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 and 209)
7. Material collected in dust collectors and multi-cyclones shall be disposed of in manner preventing entrainment in atmosphere. (Rule 209)
8. Process weight rate shall not exceed 15 tons per hour for Line 7 without prior District approval. (Rule 209)
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)

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 30days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from dust collectors DC-2 and DC-3 shall not exceed following limits:

Particulate Matter (PM₁₀):

0.02 gr/dscf (of PM) (Rule 422)
1.12 lb/hr
26.90 lb/day

(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 201.1, 209 and 210.1)

Emission Unit 029 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	029	Anhydrous Borax Loadout Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Anhydrous Borax Loadout Operation, including following equipment:

- A. Upper west bucket elevator feed covered belt conveyor (ABX-BC-134), 18" wide x 500' long with 7.5-hp motor;
- B. Lower west bucket elevator feed covered belt conveyor (ABX-BC-043), 18" wide x 415' long with 7.5-hp motor;
- C. Upper east bucket elevator feed covered belt conveyor (ABX-BC-045), 18" wide x 490' long with 7.5-hp motor, upper east belt conveyor (ABX-BC-045) with 5-hp motor;
- D. Belt conveyor feed bucket elevator (BLK-EL-033), 9"-wide x 100'-high with 7.5-hp motor;
- E. Belt conveyor feed bucket elevator (BLK-EL-052), 9"-wide x 105'-high with 7.5-hp motor;
- F. Belt conveyor feed bucket elevator (BLK-EL-093), 9"-wide x 95'-high with 7.5-hp motor,
- G. Silo feed enclosed belt conveyor (BLK-BD-235), 18"-wide x 59'-long with 7.5-hp motor;
- H. Silo feed enclosed belt conveyor (BLK-BC-247), 18"-wide x 39.5'-long with 5-hp motor;
- I. Anhydrous borax storage silo BLK-BN-241 feeding belt conveyor BLK-BC-137 to elevator BLK-EL-094 to belt conveyor PPK-BC-023 (shared with PTO 1004030 and '031);
- J. Two anhydrous borax storage silos (BLK-BN-242 and 243) feeding belt conveyors BLK-BC-048 to BLK-EL-034 to PPK-BC-023;
- K. Fabric dust collector (BLK-DC-200) serving loading operation and dust collection point between ABX-BC-133 and ABX-BC-134 with three compartments including blower rated at 15,500-acfm with 100-hp motor;
- L. Fabric collector load-out screw conveyor (BLK-SC-264) with 5-hp motor; and
- M. Fabric collector screw conveyor load out spout with 0.5-hp motor (BLK-FN-216).

OPERATIONAL CONDITIONS:

- 1. Fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 2. Fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
- 3. Screw and belt conveyors shall be equipped with dust-tight cover. (Rule 210.1)
- 4. Fabric collector exhaust stack shall be equipped with provisions for collection of pollutant samples in manner consistent with U. S. EPA test methods. (Rule 210.1)
- 5. Visible emissions from fabric collector and conveyors shall not exceed 5% opacity or ¼ Ringelmann. (Rule 210.1)
- 6. Fabric collector shall be maintained in proper working order. (Rule 210.1)
- 7. Fabric dust collector BLK-DC-200 volumetric exhaust flow rate shall not exceed 15,500 standard cubic feet per minute (scfm). (Rule 210.1)
- 8. Emissions from fabric collector stack and conveyor transfer points shall not contain particulate matter in excess of 0.022-gr/dscf. (Rule 422, Subpart OOO)
- 9. Process shall not be operated unless emission control equipment is in operation. (Rules 210.1 and 209)

Emission Unit 029 Permit Conditions

10. Material removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
11. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
12. All material transfer points and storage bins shall be vented to dust collector. (Rule 209)
13. All fabric collectors and related piping shall be maintained without any holes or non-designed openings. (Rule 210.1)
14. Product storage silos (BLK-BN-241 through BLK-BN-243) shall vent only through fabric collector BAK-DC-200 during product loading. (Rule 210.1)
15. Emission from use of this equipment shall not 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)
16. U.S. Borax, Inc. shall keep accurate daily records of process weight rates and make such records readily available to District upon request. (Rule 210.1)
17. Adequate provisions shall be made for stack sampling consistent with U. S. EPA test methods. (Rule 108.1)

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:

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

Particulate Matter (PM₁₀) Emissions:

Fabric Collector:	0.02 grains/scf
(BLK-DC-200)	2.41 lb/hr
	57.90 lb/day
	10.57 ton/yr

(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)

Emission Unit 030 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	030	Anhydrous Borax Screening/Loadout West

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Anhydrous Borax Screening/Loadout East, including following equipment:

- A. Three anhydrous borax storage silos (BLK-BN-241, '242, and '243);
- B. 200 ton loadout bin (BLK-BN-202);
- C. 150 ton loadout bin (BLK-BN-190);
- D. Silo loadout enclosed belt conveyor (BLK-BC-248), 18" wide X 86.9' long with 7.5-hp motor;
- E. Silo loadout enclosed belt conveyor (BLK-BC-237), 18" wide X 32' long with 5-hp motor;
- F. Belt conveyor feed bucket elevator (BLK-EL-094), 13" wide X 77' high with 20-hp motor;
- G. Packaging enclosed belt conveyor (PPK-BC-034), 9" wide X 92' high with 3-hp motor;
- H. Lower east bin feed covered belt conveyor (ABX-BC-044), 18" wide X 420' long with 7.5-hp motor;
- I. Enclosed belt conveyor (PPK-BC-223), 18" wide X 99.5' long with 10-hp motor;
- J. Fabric dust collector (BLK-DC-201) with three compartments including and blower with 100-hp motor rated at 13,850-acfm serving loading operation;
- K. Fabric collector loadout screw conveyor (BLK-SC-265) with 5-hp motor; and
- L. Fabric collector screw conveyor load out spout with 0.5-hp motor.

OPERATIONAL CONDITIONS:

- 1. Fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 2. Fabric collector shall be equipped with pulsejet cleaning mechanism. (Rule 210.1)
- 3. New screw and belt conveyors shall be equipped with dust-tight covers. (Rule 210.1)
- 4. Visible emissions from fabric collector and conveyors shall not exceed 5% opacity. (Rule 210.1)
- 5. Fabric collectors shall be maintained in proper working order. (Rule 209)
- 6. Fabric dust collector volumetric exhaust flow rate shall not exceed 13,850 standard cubic feet per minute (scfm). (Rule 210.1)
- 7. Emissions from fabric collector stack and conveyor transfer points shall not contain particulate matter in excess of 0.022-gr/dscf. (Rule 422, Subpart OOO)
- 8. Process shall not be operated unless emission control equipment is in operation. (Rules 210.1 and 209)
- 9. Material removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 10. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
- 11. All material transfer points and storage bins shall be vented to dust collector BLK-DC-201. (Rule 210.1)
- 12. Fabric dust collectors shall be operated without any non-designed holes or openings. (Rule 210.1)

Emission Unit 030 Permit Conditions

13. Product storage silos (BLK-BN-241 through BLK-BN-243) shall vent only through fabric collector BLK-DC-201 during product unloading. (Rule 210.1)
14. Product loadout silos (BLK-BN-190 and BLK-BN-202) shall vent only through fabric collector BLK-DC-200 during product unloading. (Rule 210.1)
15. Emission from use of this equipment shall not 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)
16. U.S. Borax, Inc. shall keep accurate daily records of process weight rates and make such records readily available to District upon request. (Rule 210.1)
17. Adequate provisions shall be made for stack sampling consistent with U. S. EPA test methods. (Rule 108.1)

COMPLIANCE TESTING REQUIREMENTS:

Compliance with fabric collector exhaust PM₁₀ emission sampling limits shall, if visible emissions are detected, be demonstrated by District-witnessed sample collection by independent testing laboratory, and official test results and field data submitted within 60 days after collection. (Rule 208.1)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector (BLK-DC-201):	0.02	gr/dscf
	2.16	lb/hr
	51.73	lb/day
	9.44	tons/yr

(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 031 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	031	Anhydrous Borax Packing

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Anhydrous Borax Packing, including following equipment:

- A. Upper east AB bridge belt conveyor (PPK-BC-023) with 3-hp motor;
- B. Two samplers (PPK-SP-047 and ‘-048) with scalping screens (PPK-SN-167 and ‘-168) with 0.25-hp motor
- C. Two AB packer bins (PPK-BN-042 and ‘-043);
- D. Coaxial loadout spout with IBC fill adaptor venting directly to fabric collector PPK-DC-172;
- E. AB sack room spill screw conveyor (PPK-SC-484) with 5-hp motor;
- F. Product conveyor (PPK-SC-009) with 5-hp motor;
- G. AB sack room packer (PPK-PK-005)
- H. AB spill bucket elevator (PPK-EL-145) with 5-hp motor.
- I. AB spill transfer and dust discharge screw conveyors (PPK-SC-485 and ‘-486) with 2-hp and 3-hp motors respectively
- J. Reverse pulse air jet fabric collector (PPK-DC-172) with three 0.33-hp motors and including 75-hp fan (shared with PTO 1004048); and
- K. AB sack room conveyor belts (PPK-BC-001 through ‘-008) each with 1-hp motor.

OPERATIONAL CONDITIONS:

- 1. Visible emissions shall not exceed 7% opacity and particulate matter emissions concentration from fabric collector stack shall not exceed 0.022-gr/dscf. (Rule 422, Subpart 000)
- 2. Scalping screens shall be ventilated to fabric collector. (Rules 209 and 210.1)
- 3. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 209)
- 4. Collector shall have operational manometer. (Rule 210.1)
- 5. Ventilation system shall be adjusted such that there are no visible dust emissions from conveyors, elevators, and bins. (Rule 210.1)
- 6. Screw conveyors shall be totally enclosed and leak-free. (Rule 209)
- 7. Bags shall be securely fastened around load-out spout such that all displaced air is vented through fabric collector PPK-DC-172. (Rule 210.1)
- 8. Equipment shall be maintained according to manufacturer’s specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
- 9. 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 location of uniform flow. (Rule 108.1)
- 10. Adequate provisions shall be made for stack sampling consistent with U.S. EPA test methods. (Rule 108.1)

Emission Unit 031 Permit Conditions

11. 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. (Rules 209 and 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)

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)

EMISSION LIMITS:

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

Particulate Matter:

- | | |
|------|---|
| 0.01 | grains/dscf (of PM) (Rule 210.1 BACT Requirement) |
| 0.43 | lb/hr (of PM) |
| 5.12 | lb/day (of PM ₁₀) |
| 0.64 | ton/yr (of PM ₁₀) |

(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 032 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	032	Fusing Plant(s) & Anhydrous Boric Acid Plant

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Fusing Plant & Anhydrous Boric Acid Plants, including following equipment:

- A. Four compartment fabric collector (ABX-DC-163) with 30-hp exhaust fan (ABX-FN-001) (shared with PTO's 1004019B and 1004010) with 4 x 1.75-hp motors;
- B. Boric acid railcar receiving pit with covered auger (ABX-BN-015) ventilated to fabric collector (ABX-DC-163) (shared with PTO's 1004019B and 1004010);
- C. 14" Boric acid pit screw conveyor (ABX-SC-487) with 15-hp motor;
- D. Elevator (ABX-EL-043) with 7.5-hp motor ventilated to ABX-DC-163 (shared with PTO's 1004019B and 1004010);
- E. Boric acid transfer screw conveyor (ABX-SC-411) with 5-hp motor;
- F. Bridge conveyor (ABA-BC-021) with 10-hp motor ventilated at ends to ABX-DC-163, shortened to discharge directly to anhydrous boric acid feed bridge conveyor (ABA-BC-140) with 10-hp motor;
- G. Fabric collector (ABA-DC-142) with airflow rate of 600-acfm with 5-hp exhaust fan (ABX-FN-201). Serves transfer point along feed bridge;
- H. Anhydrous boric acid plant feed conveyor (ABA-BC-141) with 5-hp motor, existing dust collector at transfer point from ABA-BC-141, and enclosed discharge chute to surge bin, ABA-BN-262, and anhydrous boric acid furnace feed bin, ABA-BN-263, each ventilated to fabric collector ABA-DC-071;
- I. Feeder rotary star valve (BAP-FD-444) with 3-hp motor, furnace feed weigh-belt (ABA-WD-082) with 1-hp motor, recycle screw conveyor (ABA-SC-200) with 10-hp motor, furnace feed elevator screw conveyor (ABA-SC-198) with 5-hp motor, furnace feed elevator (ABA-EL-097) with 7.5-hp motor, furnace feed screw conveyors (ABA-SC-063 and 199) with 15-hp motors, and eight under feeder feed screws (ABA-SC-001 through 008) with 10-hp to 15 hp motors;
- J. Anhydrous boric acid fusing furnace (ABA-FC-024) ventilated to venturi scrubber (ABA-DC-056) with 800-hp fan/motor assembly; and
- K. 60-hp furnace cooling fan (ABA-FN-222), three 50-hp combustion fans for burners (ABA-FN-192, 193, and 197), one 25-hp atomizing air fan for all burners (ABA-FN-196), and one 40-hp furnace cooling fan (ABA-FN-202).

OPERATIONAL CONDITIONS:

- 1. Visible emissions from fabric collectors shall not exceed 10% opacity or Ringelmann No. ½ except for not more than three minutes in any one hour. (Rule 210.1)
- 2. Visible emissions from venturi scrubber shall not exceed 10% opacity or Ringelmann No. ½ (excluding water vapor) except for not more than three minutes in any one hour. (Rule 210.1)
- 3. Fabric collectors shall be equipped with operational differential pressure indicator. (Rule 209)
- 4. Venturi scrubber shall be equipped with operational differential pressure indicator. (Rule 210.1)

Emission Unit 032 Permit Conditions

5. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 209)
6. Equipment including dust collectors and wet scrubber shall be operated and maintained per manufacturer's recommendations. (Rule 210.1)
7. All piping, ducting, connections, and elevators shall be leak-tight and shall have no visible emissions. (Rule 210.1)
8. 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)
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, Sec 41700)

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:

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

Particulate Matter (PM₁₀) Emissions:

Fabric Collector (ABX-DC-163):	0.01	grains/scf
	0.61	lb/hr
	14.60	lb/day
	2.66	ton/yr

Fabric Collector (ABA-DC-142):	0.01	grains/scf
	0.05	lb/hr
	1.20	lb/day
	0.22	ton/yr

Venturi Scrubber (ABA-DC-056):	0.01	grains/scf
	6.15	lb/hr
	147.61	lb/day
	26.94	ton/yr

(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 retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 033 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1004	033	Anhydrous Boric Acid Cooling/Milling/Screening/Storage Supra Bag Loadout Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Anhydrous Boric Acid Cooling/Milling/Screening/Storage Supra Bag Loadout Operation, including following equipment:

- A. Chill roll set (ABA-CR-011 and 012) with 10-hp motor;
- B. Pan conveyor with hood and exhaust stack (ABA-CM-022) with 15-hp motor;
- C. Sheet breaker (ABA-ML-031) with 10-hp motor;
- D. Cooling conveyor (ABA-CM-023) with 10-hp motor.
- E. Cyclone collector (ABA-DC-050) serving items A, B, C, and D; ABA-DC-050 connects to fabric collector (ABA-DC-051) with 75-hp fan (ABA-FN-198);
- F. Lump breaker (ABA-ML-032) with 7.5 motor;
- G. Cyclone dust recycle (ABA-BC-142) and screw conveyor (No. 5) with 2-hp motor;
- H. Hammermill feed elevator (ABA-EL-098) with 7.5-hp motor;
- I. Hammermill feed bin (ABA-BN-264);
- J. Two crusher feeders (ABA-FD-296 and 297);
- K. Three 75-hp hammermills (ABA-ML-041, 042, and 045);
- L. Screen bin feed elevator (ABA-EL-099) with 7.5-hp motor;
- M. Screen feed bin (ABA-BN-265) with feeder (ABA-FD-002);
- N. Scalping screen with 2.5-hp motor (ABA-SN-094);
- O. Cyclone collector (ABA-DC-052) serving items H through N connected to fabric collector ABA-DC-053);
- P. 4 mesh super bag packing station (ABA-PK-002) with reject conveyor ABA-BC-149;
- Q. Enclosed screen with two decks 60 in x 120 in powered by 7.5-hp electric motors (ABA-SN-002);
- R. Finished product screw conveyors (Nos. 7A and 7B) each with 2-hp motors;
- S. Finished product weigh belt (ABA-WD-037) with 0.5-hp motor;
- T. Dual compartment holding tank (ABA-BN-266);
- U. Conveyor belt to silo elevator (ABA-BC-148) with 1.5-hp motor;
- V. Elevator (ABA-EL-104) with 5-hp motor;
- W. Finished product elevator (ABA-EL-100) with 10-hp motor;
- X. ABA silo fill conveyor belt (ABA-BC-154) with 7.5-hp blower motor (ABA-FN-001);
- Y. 60 mesh super bag packing station (ABA-PK-001);
- Z. Four silos (ABA-BN-281 through 284);
- AA. Product dust collector (ABA-DC-053) with 75-hp exhaust fan (ABA-FN-199);
- BB. ABA silos dust collector (ABA-DC-062) atop silo with 25-hp exhaust fan (ABA-FN-002);
- CC. Rotex Model 52A 52 ft2 screening unit with 7.5-hp motor; and
- DD. Stedman Model A.30H.77 cage mill with one 30-hp & one 50-hp motor.

Emission Unit 033 Permit Conditions

OPERATIONAL CONDITIONS:

1. Screens shall be fully enclosed and covers shall be in place during operation. (Rule 209)
2. Existing dust collector shall serve discharge point of each screen and function whenever screens are in operation. (Rule 209)
3. Dust collectors shall be equipped with operational pressure differential indicators. (Rule 209)
4. Visible emissions from dust collector ABA-DC-053 shall not exceed 5% opacity for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
5. Opacity of stack emissions shall be less than 7%. Stack emissions shall not contain particulate matter in excess of 0.02-gr/dscf. (Rule 422 Subpart OOO)
6. Fugitive emissions from equipment, such as conveyor transfer points, shall be less than 10% opacity. (Rule 422 Subpart OOO)
7. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 and 209)
8. Material collected in dust collectors and multi-cyclones shall be disposed of in manner preventing entrainment in atmosphere. (Rule 209)
9. Process weight rate shall not exceed 15 tons per hour and 170 tons per day for subject permit unit without prior District approval. (Rule 210.1)
10. Throughput of Rotex, Model 52A, screen and Stedman, Model A.30H.77, cage mill shall not exceed 2 tons per hour. (Rule 210.1)
11. Owner/operator shall comply with applicable monitoring requirements of 40 CFR Part 60 §60.674. (Rule 422 Subpart OOO)
12. Owner/operator shall comply with recordkeeping and reporting requirements of 40 CFR Part 60 §60.676. (Rule 422 Subpart OOO)
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)

COMPLIANCE TESTING REQUIREMENTS:

Compliance with particulate emission limit shall be demonstrated by District-witnessed sample collection by independent testing laboratory if operation exhibits visible emissions of 10% opacity or greater. Official test results and field data shall be submitted within 30 days after testing (Rule 108.1)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector ABA-DC-051 (@ 20,000 cfm)	0.02	gr/scf (Rule 422, Subpart OOO)
	0.002	lb/hr
	0.03	lb/day
	0.005	ton/yr

Emission Unit 033 Permit Conditions

Fabric Collector ABA-DC-053 (@ 12,000 cfm)	0.01	gr/scf (BACT Requirement)
	0.15	lb/hr
	1.80	lb/day
	0.33	ton/yr
Fabric Collector ABA-DC-062 (@ 6,100-cfm)	0.022	gr/scf (Rule 422, Subpart OOO)
	0.09	lb/hr
	0.58	lb/day
	0.11	ton/yr

(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 documenting 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 209 and 210.1)

Emission Unit 035 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	035	Anhydrous Boric Acid Loadout

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Anhydrous Boric Acid Loadout, including following equipment:

- A. Bridge conveyor from anhydrous boric acid silos to back half of bin with fabric collector (BLK-DC-117 and ABA-DC-065); and
- B. Anhydrous boric acid loadout equipment including six coaxial loadout spouts and weighted hem fabric shrouds with three fabric collectors (BLK-DC-068, BLK-DC-066, and BLK-DC-063).

OPERATIONAL CONDITION:

1. Particulate matter emissions from any single source operation shall be no more than 0.1-gr/scf.
2. Visible emissions from any single emission point shall be less than 20% opacity. (Rules 401 and 404.1)

Emission Unit 040 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	040	Boiler #5

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boiler #5, including following equipment:

150 MMBtu/hr natural gas fired boiler (STM-BO-010).

OPERATIONAL CONDITIONS:

1. Boiler exhaust stack shall be equipped with provisions for collection of pollutant samples in manner consistent with U.S. EPA test methods. (Rule 425.2)
2. Total maximum daily fuel usage shall not exceed 4.4 million standard cubic feet per day (MMscf/day). (Rule 210.1)
3. Visible emissions from boiler exhaust shall not exceed 5% opacity or Ringelmann No. ¼ for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
4. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf calculated to 12% of carbon dioxide (CO₂) at standard conditions. (Rule 409)
5. Boiler exhaust concentration of sulfur oxides (calculated as SO₂) shall not exceed 2,000 parts per million on a volume basis (ppmv). (Rule 407)
6. Boiler shall be fired exclusively with Public Utility Commission (PUC) regulated quality natural gas. (Rule 210.1 BACT Requirement)
7. Operator shall comply with applicable monitoring, testing, and recordkeeping requirements of Rule 425.2. (Rule 425.2)
8. Operator shall maintain annual records of fuel use. (Rule 425.2)
9. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 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. 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 natural gas fired boiler 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 Unit 040 Permit Conditions

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	1.08	lb/hr
	25.92	lb/day
	4.73	ton/yr
<u>Sulfur Oxides (SO_x as SO₂):</u>	2.04	lb/hr
	48.98	lb/day
	8.94	ton/yr
<u>Oxides of Nitrogen (NO_x as NO₂):</u>	70	ppmv at 3% O ₂
	12.77	lb/hr
	306.36	lb/day
	55.91	ton/yr
<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.78	lb/hr
	18.72	lb/day
	3.42	ton/yr
<u>Carbon Monoxide:</u>	400	ppmv at 3% O ₂
	44.43	lb/hr
	1066.32	lb/day
	194.60	ton/yr

(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 041 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	041	Boiler #6

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boiler #6, including following equipment:

125 MMBtu/hr natural gas fired boiler (STM-BO-013).

OPERATIONAL CONDITIONS:

1. Boiler exhaust stack shall be equipped with provisions for collection of pollutant samples in manner consistent with U.S. EPA test methods. (Rule 425.2)
2. Total maximum daily fuel usage shall not exceed 3.7 million standard cubic feet per day (MMscf/day). (Rule 210.1)
3. Visible emissions from boiler exhaust shall not exceed 5% opacity or Ringelmann No. ¼ for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
4. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf calculated to 12% of carbon dioxide (CO₂) at standard conditions. (Rule 409)
5. Boiler exhaust concentration of sulfur oxides (calculated as SO₂) shall not exceed 2,000 parts per million on a volume basis (ppmv). (Rule 407)
6. Boiler shall be fired exclusively with Public Utility Commission (PUC) regulated quality natural gas. (Rule 210.1 BACT Requirement)
7. Operator shall comply with applicable monitoring, testing, and recordkeeping requirements of Rule 425.2. (Rule 425.2)
8. Operator shall maintain annual records of fuel use. (Rule 425.2)
9. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 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. 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:

Compliance with particulate emission limit shall be demonstrated by District-witnessed sample collection by independent testing laboratory if operation exhibits visible emissions of 10% opacity or greater. Official test results and field data shall be submitted within 30 days after testing (Rule 108.1 and 209)

Emission Unit 041 Permit Conditions

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.90 lb/hr
	21.60 lb/day
	3.94 ton/yr
<u>Sulfur Oxides (SO_x as SO₂):</u>	1.70 lb/hr
	40.82 lb/day
	7.45 ton/yr
<u>Oxides of Nitrogen (NO_x as NO₂):</u>	70 ppmv at 3% O ₂
	10.64 lb/hr
	255.30 lb/day
	46.59 ton/yr
<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.65 lb/hr
	15.60 lb/day
	2.85 ton/yr
<u>Carbon Monoxide:</u>	400 ppmv at 3% O ₂
	37.03 lb/hr
	888.60 lb/day
	162.17 ton/yr

(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 and 209)

Emission Unit 047 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	047	Research Pilot Plant

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Research Pilot Plant, including following equipment:

- A. Grizzly;
- B. Conveyors and elevators;
- C. Milling and screening equipment;
- D. Dissolvers and crystallizers;
- E. Solvent reactor tanks with reflux condenser;
- F. Boiler;
- G. Fabric collector (RPP-DC-04C) Wheelabrator, Located at Plant "C";
- H. 2 – Gundlach Roll Mills (Nos. 1 and 2) each with two 7.5 hp motors (30 hp total);
- I. Fabric collector (RPP-DC-02E)– serving Roll Mill No. 1;
- J. Fabric collector (RPP-DC-01E)– serving Roll Mill No. 2;
- K. 18” diameter high efficiency cyclone; and
- L. Paddle dryer with 5-hp motor.

OPERATIONAL CONDITIONS:

- 1. Cyclone shall be equipped with operational pressure differential indicator. (Rule 210.1)
- 2. Particulate matter emissions from any single source operation shall be no more than 0.1-gr/scf. (Rule 404.1)
- 3. Fabric collectors shall be in operation when roll mills are in operation. (Rule 210.1)
- 4. Visible emissions from fabric collectors RPP-DC-02E and RPP-DC-01E shall not exceed 5% opacity or Ringelmann ¼. (Rule 210.1 BACT Requirement)
- 5. All material conveyors shall be covered/enclosed and shall have no visible emissions. (Rule 210.1)
- 6. All piping, ducting, connections, and elevators shall be leak-tight and shall have no visible emissions. (Rule 210.1)
- 7. Conveyors shall be covered when in operation. (Rule 210.1)
- 8. Fines collected in dust collectors shall be returned to process. (Rule 210.1)
- 9. Visible emissions from elevator vent(s) shall not exceed 20% opacity for 3 minutes in any one-hour. (Rule 401)
- 10. Visible emissions from milling and compacting equipment shall not exceed 20% opacity for 3 minutes in any one-hour. (Rule 401)
- 11. Equipment shall be maintained according to manufacturer’s specifications to ensure compliance with emissions limitations. (Rules 210.1)
- 12. 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)

Emission Unit 047 Permit Conditions

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)

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:

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

Particulate Matter (PM₁₀) Emissions:

Fabric Collector (RPP-DC-02E):	0.015 grains/scf
Serving Roll Mill No. 1	0.001 lb/hr
	0.02 lb/day
	0.004 ton/yr

Fabric Collector (RPP-DC-01E):	0.015 grains/scf
Serving Roll Mill No. 2	0.01 lb/hr
	0.04 lb/day
	0.01 ton/yr

Balance of Research Pilot Plant:

Particulate Matter (PM ₁₀):	0.06 lb/hr
	0.49 lb/day
	0.07 ton/yr

Sulfur Oxides (Sox as SO ₂):	0.00 lb/hr
	0.01 lb/day
	0.00 ton/yr

Oxides of Nitrogen (NO ₂):	0.34 lb/hr
	2.72 lb/day
	0.37 ton/yr

Volatile Organic Compounds (VOC):	0.01 lb/hr
(as defined in Rule 210.1)	0.08 lb/day
	0.01 ton/yr

Carbon Monoxide:	0.59 lb/hr
	4.73 lb/day
	0.64 ton/yr

Emission Unit 047 Permit Conditions

(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 documenting 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 048 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	048	Anhydrous Boric Acid Packing

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Anhydrous Boric Acid Packing, including following equipment:

Two baggers with fabric collectors (PPK-DC-172) (shared with PTO 1004031) (PPK-DC-064 not in service).

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 209)
3. Fabric collector shall have operational differential pressure indicator. (Rule 209)

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)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector (PPK-DC-172):	0.02	gr/scf
	0.47	lb/hr
	11.30	lb/day
	2.06	ton/yr

(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 documenting 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 201.1, 209 and 210.1)

Emission Unit 049 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	049	Soda Ash Receiving/Storage/Handling

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Soda Ash Receiving/Storage/Handling, including following equipment:

- A. Soda ash pneumatic receiving system and storage tank with fabric collector;
- B. 650 ton soda ash silo withdrawal system including material conveyors and elevator discharging to fine ore bridge belt conveyor with fabric collector; and
- C. Fabric collector discharging collected particulate through enclosed chute to soda ash storage bin (DIS-DC-67).

OPERATIONAL CONDITIONS:

1. Particulate matter emissions from any single source operation shall be no more than 0.2 gr/scf and visible emissions from any single emission point shall be less than 20% opacity. (Rules 401 and 404.1)
2. Collectors shall have operational differential pressure indicators. (Rule 209)
3. Maximum annual throughput shall not exceed 6,400 tons per year. (Rule 210.1)

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)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector (DIS-DC-67):	0.74 lb/hr
	0.01 ton/yr

Fugitive Emissions:	0.64 ton/yr
---------------------	-------------

(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 documenting 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 201.1, 209 and 210.1)

Emission Unit 050 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	050	5 Mol Fines Receiving/Storage/Handling

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 5 Mol Fines Receiving/Storage/Handling, including following equipment:

- A. 5 Mol fines pneumatic receiving system and 132,000-gal storage silo with fabric collector;
- B. Pneumatic conveying system to two alleviators, exhaust gas returned to fabric collector;
- C. Two 5 Mol additive storage silos 1500-gal each including four enclosed augers and two enclosed transfer points to two existing bird centrifuge output belts; and
- D. Fabric collector without exhaust fan; equipment rated at 42-acfm, 144 bags totaling 2714-ft² of filter area.

OPERATIONAL CONDITIONS:

1. Fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
2. Fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
3. Conveyors shall be equipped with dust-tight cover. (Rule 210.1)
4. Visible emissions from fabric collector and conveyors shall not exceed 5% opacity. (Rule 210.1)
5. Fabric collector shall be maintained in proper working order. (Rule 210.1)
6. Process shall not be operated unless emission control equipment is in operation. (Rules 210.1)
7. Material removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
8. All material transfer points and storage bins shall be vented to dust collector. (Rule 210)
9. There shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)
10. Process rate shall not exceed 10.2-tons per hour without prior District approval. (Rule 210.1)
11. Ductwork connecting material drop points shall be maintained in air-tight condition. (Rule 210.1)
12. U.S. Borax, Inc. shall keep accurate daily records of process weight rates and make such records readily available to District upon request. (Rule 210.1)

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 Unit 050 Permit Conditions

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

MAC 144LST144 Fabric Collector	0.01	gr/acf
	0.004	lb/hr
	0.09	lb/day
	0.01	tons/yr

(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 documenting 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 201.1, 209 and 210.1)

Emission Unit 053 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1004	053	5 Mol/R46 Truck Loadout Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 5 Mol/R46 Truck Loadout Operation, including following equipment:

- A. Two retractable, coaxial load-out spouts (SHP-SP-008, '009) fed by two covered 5-hp augers (SHP-SC-390, SHP-SC-391) from two bins, including 5-hp screw conveyers (SHP-SC-446 and SHP-SC-447), and 20-hp screw conveyers (SHP-SC-418 and SHP-SC-419, SHP-SC-455 and SHP-SC-456);
- B. Ventilation system serving three eastern most silos draw-off equipment, pack-house bridge conveyors feed points, and; and
- C. 50-hp Fabric collector (BLK-DC-086) (shared with 1004006).

OPERATIONAL CONDITIONS:

1. Visible emissions from any single emission point shall be less than 20% opacity. (Rule 401)
2. Collectors shall have operational differential pressure indicators. (Rule 209)
3. Exhaust gas particulate matter concentration shall not exceed 0.1 gr/scf. (Rule 404.1)

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)

EMISSION LIMITS:

(Emissions listed on PTO 1004006)

(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 documenting 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 056 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	056	Boiler #7

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boiler #7, including following equipment:

- A. One 150,000 lb/hr. steam boiler assembly (STM-B0-018);
- B. Two circular type natural gas fired burner assemblies totaling 190 Million Btu/hr. (Ecojet Model EE-22); and
- C. One forced draft fan (STM-FN-018), 400-hp.

OPERATIONAL CONDITIONS:

- 1. Volume of natural gas burned shall not exceed 4,314,360 standard cubic feet per day (scf/day) or 1,575 million standard cubic feet per year (MMscf/yr). (Rule 210.1)
- 2. Boiler described above shall be equipped with low-NOx burners and flue gas recirculation. (Rule 210.1)
- 3. Boiler exhaust stack shall be equipped with provisions for collection of pollutant samples in manner consistent with U.S. EPA test methods. (Rule 210.1)
- 4. Burner shall utilize automatic fuel shutoff in event of flameout. (Rule 210.1)
- 5. Boiler shall be fired exclusively with natural gas fuel. (Rule 210.1)
- 6. Visible emissions shall be less than 5% opacity or Ringelmann No. ¼ except for not more than three minutes in any one hour. (Rule 210.1)
- 7. Natural gas for boiler shall conform to Southern California Gas Company (Rule 30) specifications of “natural gas” (including sulfur content not to exceed 0.75 grains per 100 standard cubic feet, as determined by EPA Test Method 15, 16, or other appropriate method). (Rule 210.1)
- 8. Unit shall comply with Rule 425.2 NOX minimization tuning procedure or shall operate in a manner maintaining stack gas oxygen content at no more than 3% by volume. (Rule 425.2)
- 9. If annual heat input exceeds 90,000 therms (8.6-MMscf) in one or more of three preceding years, in lieu of complying with NOX minimization tuning procedure or stack gas oxygen limit of 3%, emissions shall not exceed the following (Rule 425.2):
 - Oxides of Nitrogen: 30 ppmv (gaseous fuel); or
0.036 lb/MMBtu
 - Carbon Monoxide: 50 ppmvd
- 10. Owner/operator shall monitor and record the HHV and cumulative annual use of fuel; such records shall be maintained for a period of at least five years and made available to District inspection at any time. (Rule 425.2)
- 11. Equipment shall be maintained according to the manufacturer’s specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
- 12. 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 a readily available format. (Rule 210.1)
- 13. There shall be no odors detectable at or beyond the property boundary. (Rule 419)

Emission Unit 056 Permit Conditions

14. No emission resulting from the 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 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. (Rules 108.1 and 209)

Compliance with requirements of Rule 425.2 shall be verified by source testing in accordance with the requirements of Section VI.C of Rule 425.2. Emission measurements shall be made with the unit operating at conditions as close to physically possible to maximum firing rate allowed by permit. District shall be notified at least 30 days prior to testing, and test plan shall be submitted to the District at least 15 days prior to testing. Compliance test data and results shall be submitted to the District within 60 days of collection. (Rules 108.1 and 425.2)

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	1.37 lb/hr
	32.79 lb/day
	5.98 ton/yr

<u>Oxides of Sulfur (as SO₂):</u>	0.11 lb/hr
	2.59 lb/day
	0.47 ton/yr

<u>Oxides of Nitrogen (as NO₂):</u>	6.65 lb/hr
	159.63 lb/day
	29.13 ton/yr

<u>Volatile Organic Compounds(VOC):</u>	0.99 lb/hr
	23.73 lb/day
	4.33 ton/yr

<u>Carbon Monoxide:</u>	6.78 lb/hr
	162.65 lb/day
	29.68 ton/yr

(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 documenting 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)

Emission Unit 058 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	058	Boric Acid Ore Reclaim Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boric Acid Ore Reclaim Operation, including following equipment:

- A. 85 ft. span bucket wheel reclaimer with 30 in. belt conveyors;
- B. 780 ft. reclaim belt conveyor (BAP-BC-246) with 40-hp motor;
- C. Magnetic reclaim magnet (BAP-MG-005) with 5-hp motor;
- D. 256 ft. ore bin feed belt conveyor (BAP-BC-248) with 40-hp motor;
- E. Tramp metal detector (BAP-M-2);
- F. 379 ton capacity ore bin, T-1 (BAP-BN-953), with vibrating bin bottom and two 5-hp motors;
- G. Emergency standby ore feed hopper;
- H. Reclaim fabric collector (BAP-DC-140) with 7½-hp exhaust fan (BAP-FN-140) and;
- I. Ore bin fabric collector (BAP-DC-141) with 7½-hp exhaust fan (BAP-FN-141).

OPERATIONAL CONDITIONS:

1. Each fabric collector exhaust stack shall be equipped with provisions for collection of pollutant samples in manner consistent with U. S. EPA test methods. (Rule 210.1)
2. Each fabric collector shall be equipped with operational pressure differential indicators on each compartment. (Rule 210.1)
3. Particulate matter emissions from any single source operation shall be no more than 0.1-gr/scf. (Rule 404.1)
4. Fabric collectors shall be in operation when related equipment is in operation. (Rule 210.1)
5. Visible emissions from fabric collectors (BAP-DC-140) and (BAP-DC-141) shall not exceed 10% opacity (½ Ringelmann) without prior District approval. (Rule 210.1 BACT Requirement)
6. All material conveyors shall be covered/enclosed and shall have no visible emissions. (Rules 210.1)
7. All piping, ducting, connections, and elevators shall be leak-tight and shall have no visible emissions. (Rule 210.1)
8. Conveyors shall be covered when in operation. (Rule 210.1)
9. Fines collected in fabric collectors shall be returned to process. (Rule 210.1)
10. Water spray system serving reclaim operation shall be utilized and operational during all periods reclaim system is operational. (Rule 210.1)
11. Ore unconfined storage shall not produce fugitive dust emissions. (Rule 210.1)
12. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1)
13. 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)
14. 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 058 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 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 following limits:

Particulate Matter (PM₁₀) Emissions:

Conveyor/Transfer:	0.66	lb/hr
	15.84	lb/day
	2.89	ton/yr
Fabric Collector: (BAP-DC-140)	0.01	grains/scf
	0.14	lb/hr
	3.45	lb/day
	0.63	ton/yr
Fabric Collector: (BAP-DC-141)	0.01	grains/scf
	0.11	lb/hr
	2.57	lb/day
	0.47	ton/yr

(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 059 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	059	Boric Acid Rotary Reactor Scrubber

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boric Acid Rotary Reactor Scrubber, including following equipment:

- A. Under bin belt feeder belt conveyor (BAP-HF-1) with 10-hp motor;
- B. Secondary impact crusher (BAP-HM-1), equipped with 350-hp motor;
- C. Crushed ore belt conveyor (BAP-BC-249) with 30-hp motor;
- D. Rotary dissolver with enclosed feed chute and feed screw, concentrated sulfuric acid injection system, heated Borax liquor injection system, with 100-hp drive motor, 15-hp fan motor, and discharge hood ducted to scrubber;
- E. Stainless steel spray chamber scrubber (#2000135) with 10-hp pump motor;
- F. Dissolver feed sampler (BAP-SP-002) Model PRH-900;
- G. Emergency dump with water dist suppressions;
- H. Belt feeder fabric collector (BAP-DC-142) with 5-hp exhaust fan (BAP-FN-142);
- I. Dissolver feed fabric collector (BAP-DC-143) with 20-hp exhaust fan (BAP-FN-143); and
- J. 18-inch diameter by 28-feet high by exhaust fan stack (BAP-X-143).

OPERATIONAL CONDITIONS:

1. Fabric collector and wet scrubber each shall be equipped with operational differential pressure indicator. (Rule 210.1)
2. Each fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
3. All conveyors shall be equipped with dust-tight covers. (Rule 210.1)
4. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf. (Rule 404.1)
5. Sulfur compounds (as SO₂) shall be less than 0.2% by volume (2,000 ppmv). (Rule 407)
6. Fabric collectors shall be in operation when related equipment is in operation. (Rule 210.1)
7. Visible emissions from fabric collectors (BAP-DC-142) and (BAP-DC-143) shall not exceed 10% opacity or Ringelmann ½. (Rule 210.1 BACT Requirement)
8. All material conveyors shall be covered/enclosed and shall have no visible emissions. (Rules 210.1)
9. All piping, ducting, connections, and elevators shall be leak-tight and shall have no visible emissions. (Rule 210.1)
10. Conveyors shall be covered when in operation. (Rule 210.1)
11. Fines collected in fabric collectors shall be returned to process. (Rule 210.1)
12. Scrubber liquid supply line (at scrubber inlet) shall have operational flow meter, and flow shall be maintained at a minimum 25 gallons per minute (gpm). (Rule 210.1)
13. Scrubber shall have operational differential pressure indicator. (Rule 210.1)
14. Scrubber sprays and nozzles shall be maintained in competent working order. (Rule 210.1)
15. Unconfined storage shall not produce fugitive dust emissions. (Rule 210.1)
16. Area of Unconfined storage shall not exceed 900-sq.ft. (Rule 210.1)

Emission Unit 059 Permit Conditions

17. Process throughput (secondary crusher) shall not exceed 150-tons/hour without prior District approval. (Rule 210.1)
18. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rules 210.1)
19. 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)
20. 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:

Compliance with each fabric collector exhaust PM10 emission sampling limits shall, if visible emissions are detected, be demonstrated by District-witnessed sample collection by independent testing laboratory, and official test results and field data submitted within 60 days after collection. (Rule 208.1)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

<u>Fabric Collector:</u>	0.01	grains/scf
<u>@ 1,400-acfm</u>	0.12	lb/hr
<u>(BAP-DC-142)</u>	2.88	lb/day
	0.53	ton/year

<u>Fabric Collector:</u>	0.01	grains/scf
<u>@ 6,500-acfm</u>	0.56	lb/hr
<u>(BAP-DC-143):</u>	13.37	lb/day
	2.44	ton/yr

Particulate Matter (PM₁₀):

<u>Unconfined Storage:</u>	0.07	lb/day
	0.01	ton/year

H₂SO₄ (as SO₂):

<u>Wet Scrubber:</u>	1.29	lb/hr
<u>(No. 2000135)</u>	30.96	lb/day
	5.65	ton/yr

(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 documenting 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 060 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	060	Boric Acid #1 Drying/Screening/Milling/Storage Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boric Acid #1 Drying/Screening/Milling/Storage Operation, including following equipment:

- A. One 11 tph capacity dryer (BAP-DR-006) with 60-hp motor discharging to common dryer discharge screw conveyor (BAP-SC-354);
- B. Fabric dust collector (BAP-DC-129), with six compartments including blower rated at 28,600-scfm with 75-hp motor; and
- C. Fabric dust collector discharge screw conveyor (BAP-SC-361) with 5-hp motor.

OPERATIONAL CONDITIONS:

1. Each fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
2. Each fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
3. Screw and belt conveyors shall be equipped with dust-tight cover. (Rule 210.1)
4. Visible emissions from fabric collector and conveyors shall not exceed 10% opacity. (Rule 210.1)
5. Fabric collectors shall be maintained in proper working order. (Rule 209)
6. Fabric dust collector (BAP-DC-129) volumetric exhaust flow rate shall not exceed 28,600 standard cubic feet per minute (scfm). (Rule 210.1)
7. Emissions from fabric collector stack and conveyor transfer points shall not contain particulate matter in excess of 0.022-gr/dscf (0.05 g/dscm). (Rule 422, Subpart OOO)
8. Process shall not be operated unless emission control equipment is in operation. (Rules 210.1 and 209)
9. Material removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
10. All material transfer points and storage bins shall be vented to dust collector. (Rule 209)
11. There shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)
12. Emission from use of this equipment shall not 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. Process weight rate shall not exceed 30 tons per hour without prior District approval. (Rule 210.1)
14. U.S. Borax, Inc. shall keep accurate daily records of process weight rates and make such records readily available to District upon request. (Rule 210.1)
15. Adequate provisions shall be made for stack sampling consistent with U. S. EPA test methods. (Rule 108.1)
16. Exhaust gas particulate matter concentration shall not exceed 0.02 gr/dscf (Northwest Fabric Collector, #BAP-DC-129)

Emission Unit 060 Permit Conditions

COMPLIANCE TESTING REQUIREMENTS:

Compliance with each fabric collector exhaust PM₁₀ emission sampling limits shall, if visible emissions are detected, be demonstrated by District-witnessed sample collection by independent testing laboratory, and official test results and field data submitted within 60 days after collection. (Rule 208.1)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector, #BAP-DC-129:	0.02	gr/scf
	4.45	lb/hr
	106.83	lb/day
	19.50	tons/yr

(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 documenting 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 201.1, 209 and 210.1)

Emission Unit 061 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	061	Boric Acid #2 Drying/Screening/Milling/Storage Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boric Acid #2 Drying Operation, including following equipment:

- A. 11 tph capacity dryer (BAP-DR-007) with 60-hp motor discharging to common dryer discharge screw conveyor (BAP-SC-354);
- B. Fabric dust collector (BAP-DC-130), with six compartments including blower rated at 28,600 scfm with 75-hp motor; and
- C. Fabric dust collector discharge screw conveyor (BAP-SC-362) with 5-hp motor.

OPERATIONAL CONDITIONS:

1. Each fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
2. Each fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
3. Screw and belt conveyors shall be equipped with dust-tight cover. (Rule 210.1)
4. Visible emissions from fabric collector and conveyors shall not exceed 10% opacity. (Rule 210.1)
5. Fabric collectors shall be maintained in proper working order. (Rule 209)
6. Fabric dust collector (BAP-DC-130) volumetric exhaust flow rate shall not exceed 28,600 standard cubic feet per minute (scfm). (Rule 210.1)
7. Emissions from fabric collector stack and conveyor transfer points shall not contain particulate matter in excess of 0.022 gr/dscf (0.05 g/dscm). (Rule 422, Subpart OOO)
8. Process shall not be operated unless emission control equipment is in operation. (Rules 210.1 and 209)
9. Material removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
10. All material transfer points and storage bins shall be vented to dust collector. (Rule 209)
11. There shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)
12. Emission from use of this equipment shall not 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. Process weight rate shall not exceed 30 tons per hour without prior District approval. (Rule 210.1)
14. U.S. Borax, Inc. shall keep accurate daily records of process weight rates and make such records readily available to District upon request. (Rule 210.1)
15. Adequate provisions shall be made for stack sampling consistent with U. S. EPA test methods. (Rule 108.1)
16. Exhaust gas particulate matter concentration shall not exceed 0.02 gr/dscf (Northwest Fabric Collector, #BAP-DC-130)

Emission Unit 061 Permit Conditions

COMPLIANCE TESTING REQUIREMENTS:

Compliance with each fabric collector exhaust PM₁₀ emission sampling limits shall, if visible emissions are detected, be demonstrated by District-witnessed sample collection by independent testing laboratory, and official test results and field data submitted within 60 days after collection. (Rule 208.1)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector, #BAP-DC-130:	0.02	gr/scf
	4.45	lb/hr
	106.83	lb/day
	19.50	tons/yr

(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 documenting 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 062 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1004	062	Boric Acid #3 Drying/Screening/Milling/Storage Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boric Acid #3 Drying/Screening/Milling/Storage Operation, including following equipment:

- A. One 11-tph capacity dryer (BAP-DR-011) with 60-hp motor discharging to common dryer discharge screw conveyor (BAP-SC-354);
- B. Fabric dust collector (BAP-DC-131), with six compartments including blower rated at 28,600 scfm with 75-hp motor; and
- C. Fabric dust collector discharge screw conveyor (BAP-SC-363) with 5-hp motor.

OPERATIONAL CONDITIONS:

1. Each fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
2. Each fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
3. Screw and belt conveyors shall be equipped with dust-tight cover. (Rule 210.1)
4. Visible emissions from fabric collector and conveyors shall not exceed 10% opacity. (Rule 210.1)
5. Fabric collectors shall be maintained in proper working order. (Rule 209)
6. Fabric dust collector (BAP-DC-131) volumetric exhaust flow rate shall not exceed 28,600 standard cubic feet per minute (scfm). (Rule 210.1)
7. Emissions from fabric collector stack and conveyor transfer points shall not contain particulate matter in excess of 0.022-gr/dscf (0.05 g/dscm). (Rule 422, Subpart OOO)
8. Process shall not be operated unless emission control equipment is in operation. (Rules 210.1 and 209)
9. Material removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
10. All material transfer points and storage bins shall be vented to dust collector. (Rule 209)
11. There shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)
12. Emission from use of this equipment shall not 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. Process weight rate shall not exceed 30 tons per hour without prior District approval. (Rule 210.1)
14. U.S. Borax, Inc. shall keep accurate daily records of process weight rates and make such records readily available to District upon request. (Rule 210.1)
15. Adequate provisions shall be made for stack sampling consistent with U. S. EPA test methods. (Rule 108.1)
16. Exhaust gas particulate matter concentration shall not exceed 0.02 gr/dscf (Northwest Fabric Collector, #BAP-DC-131)

Emission Unit 062 Permit Conditions

COMPLIANCE TESTING REQUIREMENTS:

Compliance with each fabric collector exhaust PM₁₀ emission sampling limits shall, if visible emissions are detected, be demonstrated by District-witnessed sample collection by independent testing laboratory, and official test results and field data submitted within 60 days after collection. (Rule 208.1)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector, #BAP-DC-131:	0.02	gr/scf
	4.45	lb/hr
	106.83	lb/day
	19.50	tons/yr

(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 documenting 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 201.1, 209 and 210.1)

Emission Unit 063 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	063	Boric Acid <u>Screening\Milling\Conveying & Truck Loadout</u> Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boric Acid Screening\Milling\Conveying & Truck Loadout Operation, including following equipment:

- A. Dryer discharge screw conveyor (BAP-SC-354) with two 15-hp motors;
- B. Scalping screen feed bucket elevator feed screw conveyor (BAP-SC-020), 20" dia. X 68.8' long with 25-hp motor;
- C. Scalping screen feed bucket elevator (BAP-EL-004) 85" high with 15-hp motor;
- D. Two magnetic separator (BAP-MG-002 and '003,;
- E. Two enclosed screens (BAP-SN-003A-west & B-east) each with 7.5-hp motor;
- F. Scalping screen (BAP-SN-002), with 2-hp motor;
- G. Oversize reject waste hopper;
- H. Roller mill vibrating feeder (BAP-FD-454), 38" wide X 48" long with 5-hp motor;
- I. Roller mill (BAP-ML-003) with 20-hp motor;
- J. Roller mill discharge screw conveyor (BAP-SC-381;
- K. Sampler (SA-1);
- L. Weight belt conveyor (BAP-WD-801), 30' wide X 7' long with 2-hp motor;
- M. Day bins bypass screw conveyor (BAP-SC-030), 20" dia. X 18.3' long with 7.5-hp motor;
- N. Day bins feed bucket elevator feed screw conveyor (BAP-SC-031), 18" dia. X 10.7' long with 7.5-hp motor;
- O. Day bins feed bucket elevator (BAP-EL-003) 85' high with 15-hp motor;
- P. Day bins feed screw conveyor (BAP-SC-032), 20" dia. X 32.8' long with 15-hp motor;
- Q. Two day bins feed split screw conveyors (BAP-SC-033), each 20" dia. X 94.6' long and each with 15-hp motor;
- R. Bypass screw conveyor (BAP -SC-034) with 7.5 bhp motor;
- S. Six day bins Nos. 1 - 6 (BAP-BN-435 through BAP-BN-440) each with shutoff gate (BAP-SG-008A through BAP-SG-008E) and ventilated through fabric collector BAP-DC-122;
- T. Six under-day bin closed augers (BAP-SC-316 through BAP-SC-321) 14" dia. each with 5-hp motor;
- U. Covered return auger (BAP-SC-344) 12" dia. with 25-hp motor;
- V. Magnetic separators (BAP-MG-xxx;
- W. Dust inclined screw conveyor (BAP-SC-374) with 7.5-hp motor;
- X. Dust crossover screw conveyor (BAP-SC-375) with 3-hp motor;
- Y. Day bins transfer hi-roller belt conveyor (BAP-BC-021), 24" wide X 137' long with 7.5-hp motor (shared with 1004064);
- Z. Cyclone fabric collector with reverse pulse jet cleaning mechanism including exhaust blower rated at 15,576-acfm with 30 hp motor serving day bins transfer bucket elevator (BAP-EL-005) and six day bins BAP-BN-435 through BAP-BN-440;

Emission Unit 063 Permit Conditions

AA. Dust collector transfer screw conveyor (BAP-SC-340) with 1.5-hp motor.

BB. Emergency Truck Loadout Surge Bin (TS-2) ventilated to fabric collector BAP-DC-123.

OPERATIONAL CONDITIONS:

1. Fabric collectors shall be equipped with operational differential pressure indicator. (Rule 210.1)
2. Fabric collectors shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
3. Screw and belt conveyors shall be equipped with dust-tight cover. (Rule 210.1)
4. Visible emissions from fabric collector and conveyors shall not exceed 10% opacity. (Rule 210.1)
5. Visible emissions from oversize waste hopper shall not exceed 10% opacity. (Rule 210.1)
6. Fabric collectors shall be maintained in proper working order. (Rule 209)
7. Fabric dust collector (BAP-DC-122) volumetric exhaust flow rate shall not exceed 14,527 standard cubic feet per minute (scfm). (Rule 210.1)
8. Emissions from fabric collector stack and conveyor transfer points shall not contain particulate matter in excess of 0.022-gr/dscf (0.05-g/dscm). (Rule 422, Subpart OOO)
9. Process shall not be operated unless emission control equipment is in operation. (Rules 210.1 and 209)
10. Material removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
11. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
12. All material transfer points and storage bins shall be vented to dust collector. (Rule 209)
13. There shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)
14. Product storage day bins (BAP-BN-435 through BAP-BN-440) shall vent only through fabric collector BAP-DC-122, when filled. (Rule 210.1)
15. Emission from use of this equipment shall not 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)
16. U.S. Borax, Inc. shall keep accurate daily records of process weight rates and make such records readily available to District upon request. (Rule 210.1)
17. Adequate provisions shall be made for stack sampling consistent with U. S. EPA test methods. (Rule 108.1)
18. Waste material from dust collector shall be collected and disposed of in manner preventing entrainment of particulate matter in atmosphere, i.e. returned to process. (Rule 209)
19. Maximum throughput from dryer shall not exceed 182 tons per hour. (Rule 210.1)

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. (Rules 108.1 and 210.1)

Emission Unit 063 Permit Conditions

EMISSION LIMITS:

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

From Fabric Collector:

Particulate Matter (PM₁₀):

Cyclone Fabric	0.01	gr/acfm
Collector (14,527 acfm)	1.25	lb/hr
	29.88	lb/day
	5.45	ton/yr

(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 documenting 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 5 years. (Rules 201.1, 209 and 210.1)

Emission Unit 064 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	064	Boric Acid Pneumatic Conveying to Storage Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boric Acid Pneumatic Conveying to Storage Operation, including following equipment:

- A. Belt conveyor (BAP-BC-021) with 7.5 hp motor (shared with 1004063);
- B. Two air compressors (AC075 and 076) each with 150 hp motor;
- C. Four 1500 ton capacity bulk storage bins (BST-BN-441, 442, 443, and 444) ventilated by BAS-DC-124;
- D. 418 ton capacity off-specification bulk storage bin (BST-BN-445) ventilated by BAS-DC-124;
- E. Elevator discharge belt conveyor (BAP-BC-009 A), 24" wide X 219' long with 15-hp motor;
- F. Product transfer belt conveyor (BAP-BC-009 B), 24" wide X 135' long with 7.5-hp motor;
- G. Transport conveyor (BAP-BC-010);
- H. Product transfer elevator (BAP-EL-138);
- I. Day bins transfer bucket elevator (BAP-EL-005) ventilated through fabric collector (BAP-DC-123);
- J. Truck loadout surge bin (BAP-BN-515) vented to fabric collector (BAP-DC-123);
- K. Coaxial, retractable loading spout ventilated through 4 in. dia. duct to existing fabric collector (BAP-DC-123);
- L. Fabric filter dust collector (BAP-DC-123) including exhaust blower rated at 4700-scfm with 20-hp motor serving conveyor (BAP-SC-251); and
- M. Fabric filter dust collector (BAS-DC-124) including exhaust blower rated at 11,600-scfm with 60-hp motor serving silos belt conveyors and off-spec packaging (shared with PTO 1004067).

OPERATIONAL CONDITIONS:

- 1. Each fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 2. Each fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
- 3. Screw and belt conveyors shall be equipped with dust-tight cover. (Rule 210.1)
- 4. Visible emissions from fabric collector and conveyors shall not exceed 10% opacity. (Rule 210.1)
- 5. Fabric collectors shall be maintained in proper working order. (Rule 209)
- 6. Fabric dust collector (BAP-DC-123) volumetric exhaust flow rate shall not exceed 4,700 standard cubic feet per minute (scfm). (Rule 210.1)
- 7. Fabric dust collector (BAS-DC-124) volumetric exhaust flow rate shall not exceed 11,600-scfm. (Rule 210.1)
- 8. Emissions from fabric collector stack and conveyor transfer points shall not contain particulate matter in excess of 0.022-gr/dscf (0.05-g/dscm). (Rule 422, Subpart OOO)
- 9. Process shall not be operated unless emission control equipment is in operation. (Rules 210.1 and 209)
- 10. Material removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 11. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)

Emission Unit 064 Permit Conditions

12. All material transfer points and storage bins shall be vented to dust collector. (Rule 209)
13. There shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)
14. Bulk storage bins (BST-BN-441, 442, 443, and 444) shall vent only through fabric collector BAS-DC-124, when filled. (Rule 210.1)
15. Off specification bulk storage bin (BST-BN-445) shall vent only through fabric collector BAS-DC-124, when filled. (Rule 210.1)
16. Emission from use of this equipment shall not 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)
17. Combined boric acid conveying and truck loading process weight rate shall not exceed 210 tons per hour without prior District approval. (Rule 210.1)
18. U.S. Borax, Inc. shall keep accurate daily records of process weight rates and make such records readily available to District upon request. (Rule 210.1)
19. Adequate provisions shall be made for stack sampling consistent with U. S. EPA test methods. (Rule 108.1)
20. Exhaust gas particulate matter concentration shall not exceed 0.02 gr/scf (#BAP-DC- 123 and #BAS-DC-124).

COMPLIANCE TESTING REQUIREMENTS:

Compliance with each fabric collector exhaust PM₁₀ emission sampling limits shall, if visible emissions are detected, be demonstrated by District-witnessed sample collection by independent testing laboratory, and official test results and field data submitted within 60 days after collection. (Rule 208.1)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

BAP-DC-123:	0.02	gr/dscf
	0.73	lb/hr
	17.56	lb/day
	3.20	tons/yr
BAP-DC-124:	0.02	gr/dscf
	1.81	lb/hr
	43.33	lb/day
	7.91	tons/yr

(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 documenting 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 065 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	065	Boric Acid Off-Specification Recycle Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boric Acid Off-Specification Recycle Operation, including following equipment:

- A. Impact flowmeter E-4;
- B. Fabric filter dust collector (BAP-DC-122) with exhaust flow rate of 8000 cfm @ 14 in. S.P., (shared with PTO 1004066);
- C. Screw conveyors and bucket elevators; and
- D. Centrifuge feed tank (BPK-BN-516) located in granulation building.

OPERATIONAL CONDITIONS:

- 1. Visible emissions shall be less than 20% opacity or Ringelmann No .1 except for not more than three minutes in any one hour. (Rule 401)
- 2. Dust collector shall be equipped with one operational differential pressure indicator. (Rule 209)
- 3. All ventilation ducts shall be equipped with capped pitot port in accessible locations. (Rule 108.1)
- 4. Exhaust gas particulate matter concentration shall not exceed 0.02 gr/acf (#2000122).

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector #BAP-DC-122:	0.02	gr/dscf
	1.37	lb/hr
	32.88	lb/day

(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 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 066 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	066	Boric Acid Conveying to Railcar Loadout & Packaging Bins

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boric Acid Conveying to Railcar Loadout & Packaging Bins, including following equipment:

- A. Four gyratory feeders;
- B. Four covered screw conveyors;
- C. One 70 tph airslide (HA-1) with ventilation;
- D. One 70 tph airslide (HA-2) with ventilation;
- E. One 70 tph trommel screen () with ventilation;
- F. One 70 tph trommel screen (S-2) with ventilation;
- G. One 63 ton powder mill holding bin (TP-3) with ventilation;
- H. Two 225 ton granulated boric acid packing bins (TP-1 and TP-2) with ventilation;
- I. One 70 tph bulk rail sampler (PS-3) with ventilation;
- J. Three railcar loadout spouts with ventilation;
- K. Two outer railcar dust hoods;
- L. Two inner railcar dust hoods;
- M. One fabric collector (BAS-DC-125) (shared with PTO 1004068); and
- N. One fabric collector (BAS-DC-127) with exhaust flow rate of 17,000 cfm at 14 in. S,P.

OPERATIONAL CONDITIONS:

- 1. Visible emissions shall be less than 20% opacity or Ringelmann No . 1 except for not more than three minutes in any one hour. (Rule 401)
- 2. Each dust collector shall be equipped with one operational differential pressure indicator. (Rule 209)
- 3. Trommel screen trash disposal shall be dust-free. (Rule 209)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector (BAP-DC-127):	0.02	gr/scf
	2.73	lb/hr
	65.52	lb/day
	11.96	ton/yr

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

Emission Unit 066 Permit Conditions

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping documenting 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 201.1, 209 and 210.1)

Emission Unit 067 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	067	Boric Acid Off-Specification Packing & Railcar Loadout Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boric Acid Off-Specification Packing:& Railcar Loadout Operation, including following equipment:

- A. Conveyor (HFC-16) with 2-hp motor, under off-spec storage bin (TS-5) that feeds to rotary feeder (AL-2);
- B. Rotary feeder (AL-2) with 1.5-hp motor;
- C. Blower assembly (F016) with 50-hp motor;
- D. 4-in. diameter pneumatic conveyor line that feeds materials from air rotary feeder (AL-2) to products storage bin (TP-3);
- E. Feeder with 2-hp motor (HFC-17) from base of product storage bin (BAS-BN-513) to classifier;
- F. 6-ft. centrifugal air classifier/separator (AS-1) with 15-hp motor;
- G. International-Stanley 6-in. rotary sampler (BPK-SP-007);
- H. 5-in. volumetric screw feeder (HFC-18) located at the base of off-specification bin (T-3);
- I. Fine boric acid storage bin (T-7) with 17-ton capacity;
- J. Screw conveyor (HC-31) transferring fine boric acid dust from (T-7) to rail loadout screw;
- K. Bin vent filter (DC-7) atop of product storage bin (TP-3) equipped with 16 high glass felt, 4 1/2-in. dia. x 84-in. long polypropylene bags and pulse jet cleaning mechanism; and
- L. Fabric collector (BAS-DC-124) with 11,860-cfm volumetric exhaust flow rate (shared with PTO 1004064).

OPERATIONAL CONDITIONS:

- 1. Particulate matter emissions from any single source operation shall be no more than 0.1-gr/scf. (Rule 404.1)
- 2. Fabric collectors shall be in operation when related equipment is in operation. (Rule 210.1)
- 3. Visible emissions from fabric collectors DC-7 and BAS-DC-124 shall not exceed 10% opacity or Ringelmann ½. (Rule 210.1 BACT Requirement)
- 4. All fabric collectors shall be operated without any non-designed holes or tears. (Rule 210.1)
- 5. During operation, all material conveyors shall be covered/enclosed, and shall have no visible emissions. (Rules 210.1)
- 6. All piping, ducting, connections, and elevators shall be leak-tight and shall have no visible emissions. (Rule 210.1)
- 7. Visible emissions from all source operations (except fabric collectors, conveyors, piping, ducting, connections, and elevators) shall not exceed 15% opacity. (Rule 422 NSPS, Subpart OOO)
- 8. Fines collected in fabric collectors shall be returned to process. (Rule 210.1)
- 9. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1)

Emission Unit 067 Permit Conditions

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. 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 fabric collector 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 209)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector: (DC-7)	0.02	gr/acf
	0.14	lb/hr
	3.45	lb/day
	0.63	ton/yr

(BAS-DC-124)

Emissions for this fabric collector previously assessed on PTO 1004064

(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 documenting 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 068 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	068	Boric Acid "Bulk Pak" Loading Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boric Acid "Bulk-Pak" Loading Operation, including following equipment:

- A. 6-ft. dia. gyratory feeder (HFG-8) at bottom of powder mill holding bin (TP-3) 1 1/2-hp;
- B. Turbo mill (HM-2) with 150-hp motor;
- C. Two gyratory feeders (HFG-6 and HFG-7) each with a 2-hp motor;
- D. "Bulk-Pak" loading operation consisting of coaxially ventilated loading spout and portable scale (W-3) vented to (BAS DC-125);
- E. Bag conveyor/palletizer with 5-hp motor;
- F. Recycle/reject bag recycling system with hopper with 5-hp motor;
- G. Bulk dry container pneumatic loadout station (east of boric acid silos);
- H. Spout rotary packer with ultrasonic sealing (40-hp total);
- I. 12-in. diameter by 10-ft. long granular feed screw (BPK-SC-100) with 7.5-hp motor;
- J. Granular sampler (BPK-SA-001) with 2-hp motor;
- K. 12-in. diameter by 6-ft. long Powder feed screw (BPK-SC-101) with 7.5-hp motor;
- L. Powder sampler (BPK-SA-002) with 2-hp motor;
- M. 20-in. diameter by 22-ft. long East Packer Feed Screw (BPK-SC-102) with 10-hp motor;
- N. 20-in. diameter by 24-ft. long West Packer Feed Screw (BPK-SC-103) with 10-hp motor;
- O. Packer feed bin (BPK-BN-001);
- P. 9-in. diameter by 23-ft. long fabric collector screw (BPK-SC-104) with 3-hp motor;
- Q. Air compressor (BPK-FN-100) with 25-hp motor;
- R. Fabric collector (DC-4) (BAP-DC-125) with 50-hp motor;
- S. 5,300 cfm cartridge dust collector (DC-5) including 1,800 sq. ft. of filter area and TEFC fan with 20 hp motor serving bulk dry container loadout station (2000126);
- T. 4,500 cfm horizontal cartridge dust collector (DC-8) including 20 filter elements (900 sq. ft. filtering area) and blower fan with 20 hp motor serving bag conveyor/palletizer;
- U. "C" three module fabric collector (BPK-DC-009), 7,900-cfm exhaust fan (BPK-FN-009) with 40-hp motor serving Haver Roto-Seal Packer; and
- V. 24-in. diameter by 30-in high, 57 sq.ft. area, reverse pulse jet cleaning system, spillage collection system (BKP-DC-010), 150 cfm exhaust fan (BPK-FN-010) with 5-hp motor, and pick-up adapters.
- W. Retractable loading spout ventilated via 4-inch diameter duct to fabric collector BAP-DC-125 with 5-hp motor; and
- X. No. 2 "Bulk-Pak" loading operation consisting of coaxially ventilated loading spout with 5-hp motor and portable scale (W-3) vented to BAS-DC-125.

OPERATIONAL CONDITIONS:

- 1. Each fabric collector exhaust stack shall be equipped with provisions for collection of pollutant samples in manner consistent with U. S. EPA test methods. (Rule 210.1)

Emission Unit 068 Permit Conditions

2. Each fabric collector shall be equipped with operational pressure differential indicators on each compartment. (Rule 210.1)
3. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf. (Rule 404.1)
4. Fabric collectors shall be in operation when related equipment is in operation. (Rule 210.1)
5. Emissions from fabric collectors BAS-DC-125, DC-5, BPK-DC-009, and BPK-DC-010 shall not exceed 7% opacity or Ringelmann $\frac{1}{2}$. (Rule 210.1 BACT Requirement)
6. During operation, all material conveyors shall be covered/enclosed, and shall have no visible emissions. (Rules 210.1)
7. All piping, ducting, connections, and elevators shall be leak-tight and shall have no visible emissions. (Rule 210.1)
8. All fabric collectors shall be operated without any non-designed holes or tears. (Rule 210.1)
9. Fines collected in fabric collectors shall be returned to process. (Rule 210.1)
10. Visible emissions from all source operations (except fabric collectors, conveyors, piping, ducting, connections, and elevators) shall not exceed 10% opacity. (Rule 422 NSPS, Subpart OOO)
11. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1)
12. 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)
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)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with fabric collector 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 209)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector:	0.01	grains/scf
(BAP-DC-125)	1.24	lb/hr
	29.83	lb/day
	5.44	ton/yr

Fabric Collector:	0.01	grains/scf
(BAP-DC-126)	0.45	lb/hr
	10.90	lb/day
	1.99	ton/yr

Emission Unit 068 Permit Conditions

Fabric Collector:	0.05	grains/scf
DC-8	1.93	lb/hr
	46.29	lb/day
	8.45	ton/yr

Fabric Collector:	0.01	grains/scf
BPK-DC-009	0.68	lb/hr
	16.25	lb/day
	2.97	ton/yr

Fabric Collector:	0.01	grains/scf
BPK-DC-010	0.01	lb/hr
	0.31	lb/day
	0.06	ton/yr

(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 documenting 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 069 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	069	Sulfuric Acid Receiving & Storage Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Sulfuric Acid Receiving & Storage Operation, including following equipment:

- A. Sulfuric acid unloading station #2 with one tank truck and three rail car tank car unloading locations;
- B. Three 120-gallon/minute (gpm), 7.5-hp sulfuric acid unloading pumps (BAP-PM-P70, BAP-PM-P71 and BAP-PM-P73);
- C. One 1½ X 3 – 10-inch, 10-hp, 120-gallon/minute (gpm) truck unloading pump (BAP-PM-P72);
- D. One 413,000-gallon fixed roof atmosphere vented main acid storage tank (BAP-TK-454), and
- E Two 120-gpm, 7.5-hp transfer pumps (BAP-PM-P2A and P2B).

OPERATIONAL CONDITIONS:

- 1. Piping serving railcar unloading station No. 3 shall have no leaks exceeding 3 drops per minute. (Rule 210.1)
- 2. Compressed air shall be available for purging of wet line connection. (Rule 210.1)
- 3. Grounding wire shall be available for connection to acid delivery vehicle. (Rule 210.1)
- 4. Sulfuric acid unloaded from rail cars and trucks shall not exceed 3,042,000 gallons in any one month (24,000 tons/month). (Rules 209 and 210.1)
- 5. Granular limestone shall be kept available to be used to absorb and neutralize acid spills or leaks. (Rule 210.1)
- 6. Acid transfer lines and transfer pump shall be purged with compressed air prior to disconnection to assure no residual acid is present. (Rule 210.1)
- 7. A spill bucket with granular limestone shall be placed under drain valve. (Rule 210.1)
- 8. Loading rack “wet line” connection shall be placed in granular limestone to absorb and neutralize any residual acid in “wet line”. (Rule 210.1)
- 9. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rules 210.1 and 209)
- 10. 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)

Emission Unit 069 Permit Conditions

EMISSION LIMITS:

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

Sulfur Oxides (SO_x as SO₂):

0.00 lb/hr
0.02 lb/day
0.00 ton/yr

(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 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 209 and 210.1)

Emission Unit 070 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	070	Sulfuric Acid Day Tank & Feed Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Sulfuric Acid Day Tank & Feed Operation, including following equipment:

- A. One 29,000-gallon (691 barrels) fixed roof atmosphere vented day tank (BAP-TK-489)/T-38;
- B. Two 10-hp feed acid pumps (P43A and P43B) with piping to reactor R-1 and existing strong liquor tanks (T5A and T5B);
- C. Two filtered strong liquor tanks (BAP-TK-459)/ T-5A and (BAP-TK-60)/T-5B;
- D. Three 120-gallon/minute (gpm), 7.5-hp sulfuric acid unloading pumps (P70, P71, and P72 – shared with PTO 1004069);
- E. One 1½ x 3 –10 inch, 10-hp, 120-gpm truck loading pump (P73 – shared with PTO 1004069); and
- F. Two 120-gpm, 7.5-hp transfer pumps (P2A and P2B).

OPERATIONAL CONDITIONS:

- 1. Transfer of sulfuric acid into tank (BAP-TK-489) shall not exceed 216,000 gallons per day (3,314,650 lb/day). (Rule 209)
- 2. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rules 210.1 and 209)
- 3. Sulfuric acid rail cars may be unloaded into sulfuric acid day tank (BAP-TK-489)/T-38 when sulfuric acid storage tank BAP-TK-454/T2A (PTO 1004069) is non-operational. (Rule 209)
- 4. Pumps P70, P71, P72, and P73 may be utilized to pump acid to sulfuric acid day tank (BAP-TK-489) when sulfuric acid tank (BAP-TK-454 – PTO 1004069) is non-operational. (Rule 209)
- 5. 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)

SPECIAL CONDITION:

This modification does not authorize any change in emission of any air contaminant. (Rule 210.1)

Emission Unit 071 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	071	5 Mol/R46 Truck Loadout Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 5 Mol Truck Loadout Operation, including following equipment:

- A. One truck loading station with three retractable, coaxial loading spouts with removable rubber shrouds;
- B. Ventilation network utilizing existing railway loadout operation fabric collector (SHP-DC-119) (Shared with PTO 1004008);
- C. One 100-hp blower;
- D. Loadout bypass chute (12 in. dia.) to feed bin;
- E. Ductwork (6 in. dia.) from fabric collector (SHP-DC-119);
- F. Fabric collector (SHP-DC-119) with 100-hp exhaust fan exhausting at 30,750-scfm (shared with Permits 1004008, 303);;
- G. One retractable loading spout, 2-hp, RLS-1; and
- H. One screen (SHP-SN-001), dust-tight.

OPERATIONAL CONDITIONS:

1. Visible emissions from fabric collector SHP-DC-119 shall not exceed 5% opacity or Ringelmann $\frac{1}{4}$ for not more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
2. Fugitive emissions from equipment, such as conveyor transfer points shall not exceed 10% opacity. (Rule 422 Subpart OOO)
3. Fabric collectors shall have operational differential pressure indicators. (Rule 210.1)
4. All exhaust ducts shall be connected to appropriate collection equipment. (Rule 210.1)
5. Fabric dust collector shall be in operation when associated equipment is operated. (Rule 210.1)
6. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
7. Process weight rate shall not exceed 1,600 tons per day without prior District approval. (Rule 210.1)
8. Equipment shall be maintained according to the manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1)
9. Fabric collector exhaust stack shall be equipped with provisions for collection of pollutant samples in manner consistent with U. S. EPA test methods. (Rule 210.1)
10. Owner/operator shall comply with applicable monitoring, testing, and record keeping requirements of 40 CFR Part 60 Subpart OOO. (Rule 422 Subpart OOO)
11. 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 a readily available format and maintained for a period of at least five years. (Rule 210.1)
12. No emission resulting from the 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)

Emission Unit 071 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. (Rules 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):

<u>Fabric Collector SHP-DC-119:</u> (@ 30,750 scfm)	0.01	gr/scf (BACT Requirement)
	2.64	lb/hr
	63.26	lb/day
	11.54	ton/yr
<u>Fugitive:</u>	0.004	lb/hr (24-hr average)
	0.09	lb/day
	0.02	ton/yr

(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 documenting 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)

Emission Unit 073 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	073	One Diatomaceous Earth Receiving & Storage Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: One Diatomaceous Earth Receiving & Storage Operation, including following equipment:

- A. One 45 ton capacity (BAP-TK-511) storage silo. (Currently in place but not being used. Product ordered in bags and fed into covered SC-370);
- B. Vibrating feeder (currently in place but not used);
- C. Two covered screw conveyors (BAP-SC-370 and 371); and
- D. One 16-vent filter (BAP-DC-132).

OPERATIONAL CONDITION:

Particulate matter emissions from any single source operation shall be no more than 0.1-gr/scf and visible emissions from any single emission point shall be less than 20% opacity. (Rules 401 and 404.1)

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)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

8.50 lb/hr
37.23 ton/yr

(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 documenting 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 201.1, 209, and 210.1)

Emission Unit 077 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	077	Co-Generation Facility I

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Cogeneration Facility I, including following equipment:

- A. Electric 56,000-hp generator driver – 5423 rpm Westinghouse frame W-251 gas turbine engine (CGE-TB-10) with limitation of 615,500 standard cubic feet per hour (scfh), gaseous fueled designed, equipped with:
 1. Westinghouse multi-swirl dry-low-NOx burner assemblies (CGE-TB-11); and
 2. Inlet air filtering and conditioning system with silencer (CGE-L3-001)
- B. Co-Generation (Gen) unit with limitation of 221,000 scfm exclusively natural gas fueled duct burner (CGS-BR-001) with 8 rows of 20 flame stabilizers located downstream of gas turbine engine exhaust;
- C. Heat recover steam generator (HRSG) rated at 412,000-lb/hr of 175-psig saturated steam (CGS-BO-023), equipped with bypass damper and exhaust stack; and
- D. Electric generator (CGE-GN-206)

OPERATIONAL CONDITIONS:

1. Gas turbine engine shall be equipped with Dry-Low-NOx combustors. (Rule 210.1)
2. Gas turbine engine shall be fueled exclusively with natural gas. (Rule 210.1)
3. Visible emissions (excluding water vapor) from gas turbine engine exhaust shall not exceed 20% opacity. (Rule 401)
4. Total of fuel consumed by gas turbine engine shall not exceed 615,500-standard cubic feet per hour(scfh) without prior District approval. (Rule 210.1)
5. Total of fuel consumed by gas turbine engine and duct burner operating simultaneously shall not exceed 836,500-scfh without prior District approval. (Rule 210.1)
6. Amount of fuel consumed by gas turbine engine, duct burner and boilers 1 through 7 shall not exceed 1110.0 million (MM)Btu/hr. (Rule 210.1)
7. The amount of fuel consumed by gas turbine engine and duct burner shall be recorded in a permanent record, and shall be available for inspection by District, CARB, EPA staff upon request. (Rule 210.1)
8. NOx exhaust gas concentration and calculation of hourly emissions (lbs/hour) shall be available for inspection by District staff upon request. (Rule 210.1)
9. Permittee shall annually verify PM₁₀, NOx, and CO emissions hourly emissions by conducting performance tests from the HRSG exhaust. District and EPA shall receive written report of test results. All performance tests shall be conducted at the maximum operating capacity of the unit being tested. (Rule 210.1)
10. Testing shall be conducted with duct burners operating for hourly compliance with total NOx emissions, and also with duct burners not operating to demonstrate compliance with gas turbine engine NOx emission limits. (Rule 210.1)

Emission Unit 077 Permit Conditions

11. 30-days prior to actual testing, Permittee shall submit the District and EPA the following:
 - a. Quality assurance project plan detailing methods and procedures to be used, and
 - b. Quality assurance test plan. (Rule 108.1)
12. Cogeneration facility shall be equipped with an operational continuous monitoring system (CEM) to measure NOx exhaust gas concentration and calculate lbs/hour (mass emissions) CEM shall comply with EPA monitoring performance specifications (Title 40, Code of Federal Regulations {40 CFR}, Part 60.13 and 40 CFR Part 60, Appendix B, Performance Specifications 2). (Rule 108)
13. Stack gas volumetric flow rate shall be determined in accordance with EPA Guidance and CARB specifications (CARB or EPA Method 20 – Referencing EPA Method 19, determining NOx emission rates. (Rule 108)
14. Permittee shall submit a written record of all excess emissions to EPA and District for every calendar quarter. The report shall include the following:
 - a. Magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, date and time of commencement and completion of each excess emission time period.
 - b. Specific identification of each period of excess emissions that occur during start-ups, shutdowns, and malfunctions of the gas turbine engine. The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted shall also be reported.
 - c. Date and time identifying each period the CEM system was inoperative except for zero and span checks and the nature of the system repairs or adjustments,
 - d. When no excess emissions have occurred or the CEM system has not been inoperative, repaired, or adjusted, such information shall be stated on the report. Additionally, the following shall be reported:
 - i) Any consecutive three-hour period the average NOx emissions (as measured by the CEM) exceed the maximum emission limits.
 - ii) Any consecutive 24-hour period the average emissions of NOx emissions (as measured by the CEM) exceed the average emission limit. (40 CFR, Part 71)
15. Permittee shall maintain a record of the date, times, and duration of time periods the exhaust stream from the gas turbine engine is exhausted through the by-pass stack. (40 CFR, Part 71)
16. Permittee shall maintain all records for a minimum of 5-years. (40 CFR, Part 71)
17. 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 a readily available format. (Rule 210.1)
18. No emission resulting from the 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 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)

Cogeneration Facility (turbine) exhaust stack shall be equipped with sampling ports (in accordance with California Air Resources Board Standards), sampling platform, access to sampling platforms, and utilities for sampling equipment to perform source-sampling operations. (Rule 108.1)

Emission Unit 077 Permit Conditions

For abnormal operating conditions described below NOx emission concentration shall not be utilized to determine compliance; however, hourly, daily, and annual emissions shall be enforced at all times.

SPECIAL CONDITIONS:

- aa. For the following abnormal operating conditions, NOx concentration (20 ppmv @ 15% O2) shall not be utilized to determine compliance however, hourly, daily, and annual mass emissions as well as startup/shutdown combined cycle unit concentration limits (70 ppmv @ 15% O2) listed in Rule 425 shall be enforced at all times.
 - i. During Cold Start, if the gas turbine engine only is operating, 6 hours shall be allowed for start-up.
 - ii. During Cold Start, if U.S. Borax steam plant boilers are operating, an additional 6 hours shall be allowed for shutdown of steam plant boilers, balance the cogeneration steam flow, and establish base load conditions.
 - iii. During Hot Start, 3 hours shall be allowed for start-up.
 - iv. In the event of a utility outage, the operator will be granted a 25-hour window to run at partial load conditions. During this window, Nox concentrations may exceed permit limits, but mass conditions shall not exceed 59.39-lb/hr. If utility outage condition is not corrected, the operator shall shut down the cogeneration system and plant processing operations before the next 24-hour period has elapsed.

An orderly and systematic plant shut down process would include, but not limited to the following:

 - 1. Stop plant feed, complete dissolving of ore in circuit and empty/flush the dissolving equipment.
 - 2. Stabilize the thickeners and place the units on a recirculation flow, if necessary. This status will be maintained by the emergency back-up generators when the cogeneration system is non-operational.
 - 3. Complete crystallization of all strong liquors in the circuit.
 - 4. Complete rinsing, filtering, drying, and storage of all products in the circuit.
 - 5. Place fresh water in all lines.
- bb. During re-commissioning, after major refurbishment, the following special conditions shall apply:
 - i. Re-commissioning period starts when all mechanical, electrical, and control systems are installed and individual system startup has been completed, or when the gas turbine is first fired, whichever occurs first.
 - ii. Compliance with Nox emissions shall be determined by average daily emissions generated during re-commissioning period.
 - iii. Re-commissioning period will not exceed 60 days.

Emission Unit 077 Permit Conditions

- iv. Average daily emissions shall be determined by total Nox emissions generated during re-commissioning period divided by re-commissioning period in days. Average daily emissions shall not exceed the following:
NOX as NO2: 1425.36-lbs/day
- v. Re-commissioning period will be considered ended when:
 - 1. All mechanical and/or electrical equipment has been tested and verified to be correct,
 - 2. Emissions and power generation control systems have been tuned and are in compliance with existing permits; and
 - 3. All systems have run within design specifications for a continuous 48-hour cycle.
- cc. During periods gas turbine engine is operating in “island mode: and other conditions gas turbine is operating under no load, NOx emission concentration (NOx ppmv) shall not be utilized to determine compliance; however, hourly, daily and annual emissions shall be enforced at all times. (Rule 210.1 and Rule 425)

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	14.00	lb/hr
	336.00	lb/day
	61.32	ton/yr (12-month rolling avg.)

<u>Sulfur Oxides (SOx as SO₂):</u>	5.29	lb/hr
	126.19	lb/day
	23.03	ton/yr (12-month rolling avg.)

<u>Oxides of Nitrogen (NOx as NO₂):</u>		
<u>Gas Turbine Engine Only:</u>	20	ppmv @ 15% O ₂
	47.15	lb/hr
	1132.00	lb/day
Annual Emissions:	159.39	ton/yr (12-month rolling avg.)

<u>Gas Turbine Engine and Duct Burner:</u>	20	ppmv @ 15% O ₂
	59.39	lb/hr
	1,425.36	lb/day
	260.08	ton/yr (12-month rolling avg.)

<u>Volatile Organic Compounds (VOC):</u>	2.90	lb/hr
(as defined in Rule 210.1)	69.60	lb/day
	12.70	ton/yr (12-month rolling avg.)

<u>Carbon Monoxide:</u>	446.00	lb/hr
	10,704.00	lb/day
	1,953.48	ton/yr (12-month rolling avg.)

Emission Unit 077 Permit Conditions

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of five years. (Rule 210.1)

Emission Unit 085 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	085	Bulk Container Pneumatic Loading Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Bulk Container Pneumatic Loading Operation, including following equipment:

- A. Two station bulk container pneumatic loading facilities;
- B. Two 8 in. dia. flex hoses ventilating bulk container loading stations;
- C. Fabric collector (BAS-DC-700) with 20-hp fan, 1,800 sq.ft. filter area, and volumetric flow rate of 5,300 scfm serving pneumatic loading facilities; and
- D. Closed dust hopper under fabric collector.

OPERATIONAL CONDITIONS:

1. There shall be no visible emissions from loading stations or fabric collector exhaust. (Rule 210.1)
2. No more than 48 tons of product shall be transferred to bulk containers in one hour. (Rule 209)
3. Hoses shall be kept free of openings which allow visible emissions or dilution air. (Rules 209 and 112)
4. Only bulk containers lined with intact polyethylene liners shall be filled. (Rule 209)
5. Bulk container liner shall vent only to fabric collector via flex hoses. (Rule 209)
6. Material collected in dust collector shall be stored, handled, and disposed of, including returning to process, in manner preventing emissions. There shall be no visible emissions when dust hopper is dumped into pit. (Rule 210.1)
7. Exhaust gas particulate matter concentration shall not exceed 0.1-gr/scf. (Rule 404.1)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

0.01 gr/scf
0.48 lb/hr
11.52 lb/day
2.10 tons/yr

(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 documenting 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 201.1, 209 and 210.1)

Emission Unit 089 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1004	089	Gasoline Storage & Dispensing Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Gasoline Storage & Dispensing Operation, including following equipment:

- A. One 15,000 gallon regular unleaded gasoline storage tanks with a permanently affixed fill tube termination no more than six inches from bottom of tank and provisions for collection of gasoline vapors during filling (Phase I) – ATC No. 1004089D;
- B. Phase I (filling of storage tank) vapor collection system (VR-102-K) including the following CARB certified components:

<u>Component</u>	<u>Manufacturer/Model Number</u>
<u>Spill Containers</u>	<u>OPW 1-Series</u>
Liquid Fill Adapter	OPW 61SALP-EVR
Liquid Fill Cap	OPW 634TT-EVR
Vapor Adapter	OPW 61VSA-EVR
Vapor Cap	OPW 1711T-EVR
Drop Tube with Overfill Protection	OPW 71SO-EVR
Float Vent Valve	OPW 53 VML
Pressure Vacuum Relief Valve	Husky 5885

- C. Gasboy Model Atlas X, dispenser equipped with two product nozzles for a total of 2 coaxial balance type certified vapor recovery nozzles;
- D. Balance type Phase II (fueling of vehicle tank) vapor collection system (VR-203-AD) with 2 nozzles, including the following CARB certified components:

<u>Component</u>	<u>Manufacturer/Model Number</u>
Nozzle	VST-EVR-NB
Swivel	None
Flow Limiter	TBD
Vapor Check Valve	Included with nozzle
Coaxial Hose	ContiTech Maxxim Premier
Breakaway Fitting	Emco Wheaton a4119evr020
Dispensers	Gasboy Model Atlas X
Vapor Processor	Healy Model 9961 Clean Air Separator

Emission Unit 089 Permit Conditions

OPERATIONAL CONDITIONS:

1. Storage/dispensing facility shall be equipped with California Air Resources Board certified Phase I (filling of storage tanks) and Phase II (fueling of motor vehicles) 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. Gasoline usage for underground storage tank shall not exceed 540,000 gallons per year without prior District approval. (Rule 210.1)
4. 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 98% by weight of all gasoline vapors from entering atmosphere. (Rules 412, and 412.1)
5. All Phase I (filling of storage tank) vapor collection equipment shall be used when tanks are filled. (Rule 412)
6. Phase II (filling of vehicle tank) vapor collection equipment shall be maintained according to manufacturer's recommendations and used when vehicles tanks are filled. (Rule 412)
7. Tanks shall be equipped with pressure/vacuum relief valve set with a positive pressure setting of 2.5 to 6.0 inches H₂O and negative pressure setting of 6.0 to 10.0 inches H₂O. (Rule 412)
8. Gasoline flow through any nozzle shall not exceed 10 gallons per minute. (Rule 412.1)
9. Tanks shall be equipped with permanently submerged fill pipe terminating no more than six inches from bottom of tank. (Rule 412)
10. The Phase II Vapor Recovery System shall be installed, started, 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. Owner or operator shall conduct and pass the tests outlined in the Executive Order no later than 60 days after startup. (Rule 412.1)
11. The vapor recovery systems and their components shall be operated and maintained in accordance with the State certification requirements. (Rules 412 and 412.1)
12. 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)
13. 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)
14. 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)
15. The permittee shall perform and pass a Pressure Integrity of Drop Tube Drain Valve Assembly Test using **ARB TP-201.1C** or a Pressure Integrity of Drop Tube Overfill Protection Devices Test using **ARB TP-201.1D** if an overfill protection device is installed, at least once every twelve (12) months. (Rule 412)
16. The permittee shall perform and pass a "Static Torque of Rotatable Phase I Adaptors" test using ARB procedure **TP-201.1B** at least once every three years. (Rule 412)
17. The permittee shall perform and pass a Dynamic Back Pressure Test using ARB TP-201.4 at least once every 12 months. (Rule 412)
18. 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)

Emission Unit 089 Permit Conditions

19. The permittee shall perform and pass a Static Pressure Performance of the Healy Clean Air Separator using test procedure from Exhibit 14 of Executive Order VR-203-AD at least once every 12 months. (Rule 412.1)
20. The permittee shall perform and pass Liquid Removal requirements using the test procedure from Exhibit 5 of Executive Order VR-203-AD at least once every twelve (12) months from the date of the last successfully passed test. (Rule 412.1)
21. The permittee shall perform and pass Nozzle Bag Test using the test procedure from Exhibit 7 of Executive Order VR-203-AD at least once every 12 months. (Rule 412.1)
22. The permittee shall perform and pass Static Pressure Performance of Vapor Recovery Systems (TP-201.3) using the test procedure from Exhibit 4 of Executive Order VR-203-AD at least once every 12 months. (Rule 412.1)
23. The operator shall implement a periodic maintenance inspection program for the certified Phase II vapor recovery system in accordance with ARB approved Installation, Operation and Maintenance Manual for the Healy Phase II EVR System. The program shall be documented in an operation and maintenance (O&M) manual and shall at a minimum contain the following information:
 - a. All applicable ARB Executive Orders, Approval Letters, and District Permits;
 - b. The manufacturer's specifications and instructions for installation, operation, repair, and maintenance required pursuant to ARB Certification Procedure CP-201, and any additional instruction provided by the manufacturer;
 - c. System and/or component testing requirements, including test schedules and passing criteria for each of the standard tests. The owner/operator may include any non-ARB required diagnostic and other tests as part of the testing requirements;
 - d. Protocol for performing periodic maintenance inspections including the components to be inspected and the defects requiring repair; and
 - e. Additional O&M instructions, if any, that are designed to ensure compliance with the applicable rules, regulations, ARB Executive Orders, and District permit conditions, including replacement schedules for failure or wear prone components. (Rule 412.1)
24. 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)
25. The operator shall maintain monthly gasoline throughput records. (Rule 412.1)
26. All records required by this permit shall be retained on-site for a period of at least five years and shall be made available for inspection upon request. (Rule 412.1)
27. 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)

Emission Unit 089 Permit Conditions

28. 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 has authorized its use pending re-inspection. All such defects shall be tagged “out of service” upon detection. (Rule 412 and 412.1)
29. The District shall be notified by the permittee 7 days prior to each test. The test results shall be submitted to the District no later than 30 days after each test. (District Rule 108.1)
30. 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)
31. No emission resulting from the 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 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. (Rules 108.1 and 210.1)

SPECIAL CONDITIONS:

- aa. Vapor-return and/or vapor control systems used to comply with the requirements of this Authority to Construct 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 attached CARB Executive Orders VR-102-X and VR-203-AD. (Rule 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)
- dd. Owner/operator shall complete and pass the Liquid Condensate Trap Compliance Test Procedure using test procedure from Exhibit 9 of Executive Order VR-203-AD at least once every 12 months, if applicable. (Rule 412.1)

EMISSION LIMITS:

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

Gasoline Dispensing Facility:

<u>Volatile Organic Compounds (VOC):</u>	0.72 lb/day
(as defined in Rule 210.1)	0.13 ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of five years. (Rules 209 and 210.1)

Emission Unit 104 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	104	Cooling Tower (Cells 1-5)

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Cooling Tower (Cells 1-5), including following equipment:

Cooling tower (Cells 1-5) at main refinery.

OPERATIONAL CONDITIONS:

1. Particulate emissions shall be no more than 0.1-gr/scf. (Rule 404.1)
2. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)

Emission Unit 105 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	105	Cooling Tower (2 Cells)

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Cooling Tower (2 Cells), including following equipment:

Cooling tower (2 Cells) at Boric Acid Plant.

OPERATIONAL CONDITIONS:

1. Particulate emissions shall be no more than 0.1-gr/scf. (Rule 404.1)
2. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)

Emission Unit 168 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	168	Piston Engine with Fire Pump

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Piston Engine with Fire Water Pump, including following equipment :

2500-gpm (@ 135 psig) firewater pump driven by 399-hp diesel fueled piston engine with turbocharger.

OPERATIONAL CONDITIONS:

1. Crankcase ventilation to engine air inlet, or 90% efficient control device for crankcase VOC emissions. (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. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not exceed 5% opacity or Ringelmann No. 1/4 for more than 3 minutes in any one hour. (Rule 210.1)
4. Exhaust gas particulate matter concentration shall not exceed 0.1 grain/ft³ of gas at standard conditions. (Rule 404.1)
5. Fuel for diesel piston engine shall conform to California Air Resource Board standards for reformulated diesel fuel (low sulfur, 0.05% by weight and low aromatic hydrocarbon, 20% by weight). (Rule 210.1)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 and Rule 209)
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 209)
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 Sec 41700)
9. Pump operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
10. Operation of fire water pump engine for maintenance and testing of shall not exceed 30 hours/year. (California Code of Regulations Title 17, Section 93115)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal 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 District within 30 days after test completion. (Rule 108.1 and 209)

Emission Unit 168 Permit Conditions

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.15 gm/bhp-hr
	0.13 lb/hr
	1.06 lb/day
	0.01 ton/yr

<u>Sulfur Oxides (SO_x as SO₂):</u>	0.003 lb/hr
	0.02 lb/day
	0.00 ton/yr

<u>Oxides of Nitrogen (NO_x as NO₂):</u>	2.8 gm/bhp-hr
	2.46 lb/hr
	19.70 lb/day
	0.25 ton/yr

<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.18 lb/hr
	1.41 lb/day
	0.02 ton/yr

<u>Carbon Monoxide:</u>	2.29 lb/hr
	18.30 lb/day
	0.23 ton/yr

(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 documenting 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 177 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	177	Main Shop Paint Spray Booth

Emission Unit Equipment Description/Permit Conditions**Federally Enforceable Conditions**

EQUIPMENT DESCRIPTION: Paint Spray Booth, including following equipment:

- A. One 42 in. x 36 in. paint spray booth;
- B. 1-hp motor;
- C. Four 20-in. x 20-in. filter pads; and
- D. Non-refillable paint spray cans.

OPERATIONAL CONDITIONS:

- 1. Only non-refillable spray cans shall be used in spray booth. (Rule 210.1)
- 2. Visible emissions shall not exceed 5% opacity (No. ¼-Ringelmann) for not more than 3 minutes in any one hour. (Rule 210.1)
- 3. Exhaust gas particulate matter concentration shall not exceed 0.1-gr/scf. (Rule 404.1)
- 4. Spray booth shall be used when coating objects which can be contained within this spray booth. (Rule 210.1)
- 5. Exhaust Filters shall be replaced per manufacturer's recommendations to achieve optimum capture as indicated by differential pressure across filters. (Rule 210.1)
- 6. A person shall not use non-refillable spray cans with VOC content in excess of the limits for the following application types: (Rule 210.1)

Coating Category	VOC Content	
	Baked	Air Dried
Camouflage	360 g/l (3.0 lb/gal)	420 g/l (3.5 lb/gal)
Electrical Insulating Varnish	420 (3.5)	420 (3.5)
Etching Filler	420 (3.5)	420 (3.5)
Extreme High Gloss	360 (3.0)	420 (3.5)
Extreme Performance	360 (3.0)	420 (3.5)
General, One Component	275 (2.3)	275 (2.3)
General, Multi-Component	275 (2.3)	340 (2.8)
Heat Resistant	360 (3.0)	420 (3.5)
High Performance Architectural	750 (6.2)	750 (6.2)
High Temperature	420 (3.5)	420 (3.5)
Metallic/Iridescent Coating	420 (3.5)	420 (3.5)
Military Specification	275 (2.3)	340 (2.8)
Mold-Seal	420 (3.5)	420 (3.5)
Pan Backing	420 (3.5)	420 (3.5)
Pretreatment Coating	420 (3.5)	420 (3.5)
Touch-up and Repair Coating	360 (3.0)	420 (3.5)

Emission Unit 177 Permit Conditions

Coating Category	Baked	Air Dried
Silicone Release	420 (3.5)	420 (3.5)
Solar Absorbent	360 (3.0)	420 (3.5)
Solid Film Lubricant	880 (7.3)	880 (7.3)
Vacuum-Metalizing	420 (3.5)	420 (3.5)
Drum Coating, New, Exterior	340 (2.8)	340 (2.8)
Drum Coating, New, Interior	420 (3.5)	420 (3.5)
Drum Coating, Reconditioned, Exterior	420 (3.5)	420 (3.5)
Drum Coating, Reconditioned, Interior	510 (4.2)	510 (4.2)
All Other Coatings	275 (2.3)	340 (2.8)

7. Surface Preparation and Equipment Cleanup Requirements: (Rule 210.1)

No person shall conduct surface preparation or equipment cleanup activities unless the following requirements are met:

- a. VOC content of surface preparation solvent shall not exceed 25 g/l (0.2 lb/gal)
- b. Cleaning Devices and Methods: no person shall perform solvent cleaning operations unless one of the following cleaning devices or methods is used:
 - i. Wipe cleaning; and
 - ii. Spray bottles or containers of 16 fluid ounces or less from which solvents are applied without a propellant induced force.

8. Storage and Disposal Requirements: Regardless of VOC content, all VOC-containing materials used in solvent cleaning operations shall be stored in non-absorbent, vapor-tight containers that are kept closed at all times except when filling or emptying. (Rules 210.1)

9. Record Keeping Requirements (Rules 210.1):

Any operator that uses coatings or solvents shall maintain and have the following available on site at all times:

- a. Current list of all VOC containing products in use that includes any data necessary to evaluate compliance, including but not limited to the following, as applicable:
 - i. Material name and manufacturer's identification;
 - ii. Application method;
 - iii. Material type and specific use instructions; and
 - iv. VOC actual and VOC regulatory for coatings applied, or VOC content for solvents.
- b. Daily coating and solvent use records, including the following information for each:
 - 1) VOC content in grams/liter (or pounds/gallon) as applied/used; and
 - 2) Volume of each coating/solvent in liters (or gallons) applied/used.
 - 3) Type and amount of solvent used for cleanup and surface preparation.
 - 4) If purchase records are used to determine the amount of solvents used, then records and manifests of the amounts of solvents disposed of or sent to a recycler must also be maintained and made available to the APCO upon request.
- c. Current manufacturer specification sheets, material safety data sheets, technical data sheets, or air quality data sheets, which list the VOC actual for coatings and VOC regulatory for coatings of each ready-to-spray coating (based on the manufacturer's stated mix ratio), and VOC content of each solvent;
- d. Purchase records identifying the name, type, and volume of coatings and solvents shall be maintained;
- e. Records required by this rule shall be retained for a minimum of three years and made available to the APCO upon request.

Emission Unit 177 Permit Conditions

10. A person shall not discharge into the atmosphere more than 15 pounds of organic materials in any 1 day from any article, machine, equipment, or other contrivance in which any organic solvent or any material containing organic solvent comes into contact with flame or is baked, heat-cured, or heat-polymerized in the presence of oxygen, unless said discharge has been reduced by at least 85%. (Rule 410)
11. A person shall not discharge into the atmosphere more than 40 pounds of organic materials in any 1 day from any article, machine, equipment, or other contrivance used under conditions not described in Operational Condition 3 unless said discharge has been reduced by at least 85%. These include emissions of organic materials into the atmosphere resulting from air or heated-drying products for the first 12 hours after their removal from any article, machine, or other contrivance. (Rule 410)
12. A person shall not during any one day dispose of a total of more than 1½ gallons of any photochemically reactive solvent as defined in Rule 410.X, or material containing more than 1½ gallons of any such photochemically reactive solvent into the atmosphere. (Rule 410.2)
13. Surface coating operations shall not discharge quantities of air contaminants or other material which:
 - a. Cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or
 - b. Endanger the comfort, repose, health, or safety of any such persons or the public; or
 - c. Cause or have a natural tendency to cause injury or damage to business or property. (Rule 419)
14. Coatings containing chromium compounds shall not be spray applied. Roll, dip, or brush applications may be used. (Rule 419 and CH&SC 41700)

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:

<u>Particulate Matter (PM₁₀):</u>	2.31	lb/day
	0.01	ton/year
<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	13.87	lb/day
	0.07	ton/year

(Emission limits are shared with Permit No. 1004179A)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping documenting 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 180 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	180	Sandblasting Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Sandblasting Operation, including following equipment:

- A. 6.5-cu.ft. Schmidt abrasive blast unit with hose, blast nozzle, and 36-ton fixed feed tank, and
- B. CARB certified blast media.

OPERATIONAL CONDITIONS:

1. Abrasive blasting operations shall be conducted within a permanent building unless steel or iron shot/grit is used exclusively, item to be blasted exceeds 8 feet in any dimension, or surface being blasted is situated at its permanent location or no further away than is necessary to allow blasting. (Calif. Code of Regulations Title 17, Sec 92000 through 92500)
2. Permissible outdoor blasting (except where steel or iron shot/grit is used) shall utilize wet abrasive blasting, hydroblasting, vacuum blasting, or abrasives certified for permissible dry outdoor blasting. (CCR Title 17, Sec 92500)
3. For abrasive blasting conducted outside a permanent building, no air contaminant shall be discharged into atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann No. 2 or equivalent to 40% opacity. (CCR Title 17, Sec 92200)
4. For abrasive blasting conducted within any permanent building, no air contaminant shall be discharged into atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark or darker than Ringelmann No. 1 or equivalent to 20% opacity. (CCR Title 17, Sec 92200)
5. No emissions shall cause injury, detriment, nuisance, annoyance or endanger comfort, repose, health, or safety of public or have natural tendency to cause injury or damage to business or property. (CH&SC, Sec 41700)

Emission Unit 182 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	182	Bulk Storage Facility (Dome #1 West)

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Bulk Storage Facility (Dome #1 West), including following equipment:

- A. Conveyor belts:
 - 1. Dome feed transfer belt (HB-2) 25 hp motor (shared with PTO 1004183);
 - 2. Dome feed belt (HB-3) 30 hp motor;
 - 3. Dome reclaim belt (HP-5) 50 hp motor (shared with PTO 1004183);
 - 4. North transfer belt (HP-6) 20 hp motor (shared with PTO 1004183);
 - 5. West transfer belt (HP-7) 25 hp motor (shared with PTO 1004183);
 - 6. Rotex screen;
 - 7. Dome reclaim to high speed loadout belt (HB-8) 25 hp motor (shared with PTO 1004183); and
 - 8. Dome feed and dome reclaim weight scales (W-2 and W-3) (shared with PTO 1004183).
- B. Concrete storage dome (D-1) with 20,000 ton storage capacity. 150 ft. dia x 70 ft. high;
- C. Air operated slide gates:
 - 1. Dome #1 feeder gate (MG-1A);
 - 2. Dome #1 mid feeder gate (MG-1B);
 - 3. Dome #1 edge feeder gate (MG-1C);
 - 4. Dome feed diverter gate (MG-5) (shared with PTO 1004183);
 - 5. Dome #1 selector gate (MG-6); and
 - 6. Railcar diverter slide gate (MG-8) (shared with PTO 1004183).
- D. Fans:
 - 1. Dome feed 40 hp dust collector fan (F-2) serving DC-3 (shared with PTO 1004183);
 - 2. Dome reclaim 75 hp dust collector fan (F-3) (shared with PTO 1004183);
 - 3. Dome #1 dust collector fan (F-4) 2 hp;
 - 4. (F-6) (shared with PTO 1004183); and
 - 5. Dome reclaim 50 hp (F-8) (shared with PTO 1004183) serving DC-2.
- E. Electric hoists:
 - 1. Dome 1 chain reclaim hoist (L-1) 10-hp; and
 - 2. Scalping screen jib hoist (L-3) 3-hp (shared with 1004183).
- F. Tunnel sump pump (P-1) 3-hp (shared with 1004183);
- G. Dust collectors:
 - 1. Dome reclaim three compartment dust collector (DC-2) 10,000 cfm (shared with PTO 1004183A);
 - 2. Dome feed dust collector (DC-3) 7974 cfm (shared with PTO 1004183);
 - 3. Dome reclaim dust collector (DC-4) 16285 cfm (shared with PTO 1004183); and
 - 4. Dome #1 dust collector (DC-5) 1500 cfm.

Emission Unit 182 Permit Conditions

H. Screw conveyors:

1. Dome feed dust collector product screw (HC-5) 2-hp (shared with 1004183);
2. Dome #1 reclaim screw (HC-6) 150-hp;
3. Dome #1 reclaim tag screw (HC-7) 10-hp;
4. Dome #1 column drive (HC-8) 7.5-hp;
5. Dome #1 column drive assist (HC-9) 10-hp; and
6. Dome reclaim dust collector product screw (HC-14) 2-hp (shared with 1004183).

I. Vibrating pan feeders, 60 inches wide:

1. Dome #1 feeder (HFV-1A) 10-hp;
2. Dome #1 mid feeder (HFV-1B) 10-hp; and
3. Dome #1 edge feeder (HFV-1C) 10-hp.

J. Electric vibrators:

1. Six dust collector vibrators (V-3A, V-3B, V-3C, V-4A, V-4B, and V-4C) (shared with 1004183);
2. Three dome hopper vibrators (V-5A, V-5B, and V-5C); and
3. Dome vibrating scalping screen (S-1) 15-hp (shared with 1004183).

OPERATIONAL CONDITIONS:

1. Fabric collector shall be equipped with operational differential pressure indicator. (Rule 209)
2. 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 location of uniform flow. (Rule 108.1)
3. U. S. Borax, Inc. shall maintain fabric collectors per manufacturer's recommendations to maintain control efficiency of 99.725%. (Rule 210.1)
4. Only three of six reclaim feeders serving HP-5 belt conveyor may operate at any one time. (Rule 209)
5. Visible emissions shall be no more than 7% opacity. (Rule 422 NSPS)
6. Fugitive emissions from equipment, such as conveyor transfer points, shall be less than 10% opacity. (Rule 422)
7. Particulate emissions shall be no more than 0.02 gr/dscf. (Rule 422 NSPS)
8. Maximum process rate shall not exceed 800 tons per hour on conveying feeding belt HP-2 or reclaiming material on conveying belt HB-5. (Rule 210.1)
9. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
10. 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)
11. Exhaust gas particulate matter concentration shall not exceed 0.02 grains/scf from any emission point. (Rule 422 NSPS 40 CFR Part 60, Subpart OOO)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from each fabric dust collector shall not exceed following limits:

Emission Unit 182 Permit Conditions

Particulate Matter (PM₁₀):

DC-3: 0.13 lb/hr (of PM₁₀)

DC-2 or DC-4: 0.08 lb/hr (of PM₁₀)

DC-5 or DC-6: 0.07 lb/hr (of PM₁₀)

During Dome Filling: 4.80 lbm/day (of PM₁₀) Total from DC-3 and DC-5

6.40 lbm/day (of PM₁₀) Total from DC-3, DC-5, and DC-6

When Reclaiming: 3.64 lbm/day (of PM₁₀) Total from DC-2 and DC-4

(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 documenting 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 183 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	183	Bulk Storage Facility (Dome #2 East)

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Bulk Storage Facility (Dome #2 East), including following equipment:

- A. Conveyor belts:
 - 1. Dome feed transfer belt (HB-2) 25 hp motor (shared with PTO 1004182);
 - 2. Dome feed belt (HB-4) 30 hp motor;
 - 3. Dome reclaim belt (HP-5) 50 hp motor (shared with PTO 1004182);
 - 4. North transfer belt (HP-6) 20 hp motor (shared with PTO 1004182);
 - 5. West transfer belt (HP-7) 25 hp motor (shared with PTO 1004182);
 - 6. Rotex screen;
 - 7. Dome reclaim to high speed loadout belt (HB-8) 25 hp motor (shared with PTO 1004182); and
 - 8. Dome feed and dome reclaim weight scales (W-2 and W-3) (shared with PTO 1004182).
- B. Concrete storage dome (D-2) with 20,000 ton storage capacity, 150 ft. dia x 70 ft. high;
- C. Air operated slide gates:
 - 1. Dome #2 feeder gate (MG-2A);
 - 2. Dome #2 mid feeder gate (MG-2B);
 - 3. Dome #2 edge feeder gate (MG-2C);
 - 4. Dome feed diverter gate (MG-5) (shared with 1004182);
 - 5. Dome #2 selector gate (MG-7); and
 - 6. Railcar diverter slide gate (MG-8) (shared with 1004182).
- D. Fans:
 - 1. Dome feed 40-hp dust collector fan (F-2) serving DC-3 (shared with 1004182);
 - 2. Dome reclaim 75-hp dust collector fan (F-3) (shared with 1004182);
 - 3. Dome #2 dust collector fan (F-5) 2-hp;
 - 4. F-6 (shared with EU 182); and
 - 5. Dome reclaim 50-hp (F-8) (shared with 1004182A) serving DC-2.
- E. Electric hoists:
 - 1. Dome #2 chain reclaim hoist (L-2) 10-hp; and
 - 2. Scalping screen jib hoist (L-3) 3-hp (shared with 1004182).
- F. Tunnel sump pump (P-1) 3-hp (shared with 1004182A);
- G. Dust collectors:
 - 1. Dome reclaim three compartment dust collector (DC-2) 10,000 cfm (shared with 1004182);
 - 2. Dome feed dust collector (DC-3) 7974 cfm (shared with 1004182);
 - 3. Dome reclaim dust collector (DC-4) 16285 cfm (shared with 1004182); and
 - 4. Dome #2 dust collector (DC-6) 1500 cfm.

Emission Unit 183 Permit Conditions

H. Screw conveyors:

1. Dome feed dust collector product screw (HC-5) 2-hp (shared with 1004182);
2. Dome #2 reclaim screw (HC-10) 150-hp;
3. Dome #2 reclaim tag screw (HC-11) 10-hp;
4. Dome #2 column drive (HC-12) 7.5-hp;
5. Dome #2 column drive assist (HC-13) 10-hp; and
6. Dome reclaim dust collector product screw (HC-14) 2-hp (shared with 1004182).

I. Vibrating pan feeders, 60 inches wide:

1. Dome #2 feeder (HFV-2A) 10-hp;
2. Dome #2 mid feeder (HFV-2B) 10-hp; and
3. Dome #2 edge feeder (HFV-2C) 10-hp.

J. Electric vibrators:

1. Six dust collector vibrators (V-3A, V-3B, V-3C, V-4A, V-4B, and V-4C) (shared with 1004182A);
2. Three dome hopper vibrators (V-6A, V-6B, and V-6C); and
3. Dome vibrating scalping screen (S-1) 15-hp (shared with 1004182).

OPERATIONAL CONDITIONS:

1. Fabric collector shall be equipped with operational differential pressure indicator. (Rule 209)
2. 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 location of uniform flow. (Rule 108.1)
3. U. S. Borax, Inc. shall maintain fabric collectors per manufacturer's recommendations to maintain control efficiency of 99.725%. (Rule 210.1)
4. Only three of six reclaim feeders serving HP-5 belt conveyor may operate at any one time. (Rule 209)
5. Visible emissions shall be no more than 7% opacity. (Rule 422 NSPS)
6. Fugitive emissions from equipment, such as conveyor transfer points, shall be less than 10% opacity. (Rule 422)
7. Particulate emissions shall not exceed 0.02 gr/dscf. (Rule 422 NSPS 40 CFR Part 60, Subpart OOO)
8. Maximum process rate shall not exceed 800 tons per hour on conveying feeding belt HB-2 or reclaiming material on conveying belt HB-5. (Rule 210.1)
9. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
10. 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 LIMITS:

Maximum emission rate of each air contaminant from each fabric dust collector shall not exceed following limits:

Emission Unit 183 Permit Conditions

<u>Particulate Matter (PM₁₀)</u>:	0.02 grains/scf from any emission point (Rule 422 NSPS)
DC-3:	0.13 lb/hr (of PM ₁₀)
DC-2 or DC-4:	0.08 lb/hr (PM ₁₀)
DC-5 or DC-6:	0.07 lb/hr (PM ₁₀)
During Dome Filling:	4.80 lbm/day (of PM ₁₀) Total from DC-3 and DC-5 6.40 lbm/day (of PM ₁₀) Total from DC-3, DC-5, and DC-6
When Reclaiming:	3.64 lbm/day (of PM ₁₀) Total from DC-2 and DC-4

(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 documenting 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 185 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	185	Industrial Vacuum System

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Industrial Vacuum System, including following equipment:

One 30 hp electric industrial vacuum system.

OPERATIONAL CONDITIONS:

1. Particulate emissions shall be no more than 0.1%-gr/scf. (Rule 404.1)
2. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
3. Collected dust shall be disposed of in manner which prevents entrainment in atmosphere. (Rule 209)

Emission Unit 186 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	186	Industrial Vacuum System

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Industrial Vacuum System, including following equipment:

One 30 hp electric industrial vacuum system.

OPERATIONAL CONDITIONS:

1. Particulate emissions shall be no more than 0.1%-gr/scf. (Rule 404.1)
2. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
3. Collected dust shall be disposed of in manner which prevents entrainment in atmosphere. (Rule 209)

Emission Unit 188 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	188	Industrial Vacuum System

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Industrial Vacuum System, including following equipment:

One 30 hp electric industrial vacuum system.

OPERATIONAL CONDITIONS:

1. Particulate emissions shall be no more than 0.1%-gr/scf. (Rule 404.1)
2. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
3. Collected dust shall be disposed of in manner which prevents entrainment in atmosphere. (Rule 209)

Emission Unit 205 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	205	Flocculent Feed Tank with Bin Vent Dust Collector

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Flocculent Feed Tank with Bin Vent Dust Collector, including following equipment:

- A. One 1,560 cubic foot flocculent feed tank assembly, approximately 36 feet high, with self contained hopper and discharge chute; and
- B. Pneumatic tank fill system for flocculent delivery rated at 20 tons per hour.

OPERATIONAL CONDITIONS:

- 1. Flocculent tank fill rate shall not exceed 20 tons per hour and 40 tons per day without prior District approval. (Rules 209 and 210.1)
- 2. Ductwork shall be maintained leak-free. (Rule 209)
- 3. Opacity of stack emissions shall be less than 7%. Stack emissions shall not contain particulate matter in excess of 0.02-gr/dscf. (Rule 422)
- 4. Fugitive emissions from equipment, such as conveyor transfer points shall be less than 10% opacity. (Rule 422)
- 5. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 and 209)
- 6. 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)
- 7. Exhaust gas particulate matter concentration shall not exceed 0.02-gr/dscf (of PM). (Rule 422)

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)

EMISSION LIMITS:

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

Particulate Matter: 0.06 lb/hr (of PM₁₀)
 0.12 lb/day (of PM₁₀)

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

Emission Unit 205 Permit Conditions

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping documenting 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, 210.1, and 201.1)

Emission Unit 207 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	207	Borates Tailings Ponds Reclamation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Borates Tailings Ponds Reclamation, including following equipment:

- A. Eleven borates reclamation ponds 1 - 6 and letters A - E, (existing, modified with fugitive dust retardant, reclaimed, or neither i.e., "wet"); and
- B. Acrylic co-polymer fugitive dust retardant, or equivalent.

OPERATIONAL CONDITIONS:

1. U. S. Borax, Inc. shall apply dust retardant initially to ponds 1 - 4 and reclaim ponds A - E with pond 5 scheduled for treatment in 1996 and pond 6 to be treated when dry. (Rule 209)
2. Opacity of visible emissions from ponds shall not exceed 10% under normal wind conditions. (Rules 209 and 210.1 BACT Requirement)
3. Dust retardant shall be applied and maintained according to manufacturer's recommendation unless pond is wet or reclamation phase has begun. (Rules 209 and 210.1 BACT Requirement)
4. No emission resulting from use of this equipment (i.e., product) shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419)

EMISSION LIMITS:

Average particulate emission rate from all borates tailings ponds 1 - 6 and letters A - E shall not exceed following limits:

Particulate Matter (PM₁₀): 68.49 lb/day
 12.50 ton/yr

(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, 210.1, and 201.1)

SPECIAL CONDITIONS:

- aa. U.S. Borax, Inc. shall apply for separate Emission Reduction Credit Banking Certificate for particulate emission reduction resulting from application of dust retardant from ponds 5 and 6. (Rule 209)
- bb. This Permit to Operate does not authorize any increases in amount of emissions above that previously authorized. (Rule 210.1)

Emission Unit 208 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	208	On-Site Landfill Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: On-Site Landfill Operation, including following equipment:

Sixty acre landfill comprised of gangue and refuse waste.

OPERATIONAL CONDITIONS:

1. Landfill operation shall comply with District PM₁₀ Fugitive Dust policy. (Rule 209)
2. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)

Emission Unit 213 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	213	Ammonium Nitrate Storage Unloading Operation #3

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Ammonium Nitrate Storage Unloading Operation #3, including following equipment:

- A. 14,000-gallon (100 ton) ammonium nitrate storage tank equipped with bin vent filter (DRL-BN-001);
- B. Provisions for pneumatically loading tank; and
- C. Truck loadout spout equipped with dust control boot.

OPERATIONAL CONDITIONS:

- 1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 2. Bin vent exhaust particulate matter concentration shall be no more than 0.1 gr/scf. (Rule 404.1)

Emission Unit 222 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	222	Boric Acid Dryer No. 4

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boric Acid Dryer, including following equipment:

- A. Dryer feed screw conveyor (BAP-SC-356C) 24" dia. X 41.8' long with 25-hp motor;
- B. Dryer feed screw conveyor (BAP-SC-24D) 16" dia. X 18.3' long with 7.5-hp motor;
- C. 12-MMBtu/hr FMC rotary dryer (BAP-DR-012) with 2 burners (6-MMBtu/hr each), 150-hp drive motor, and 25-hp fan motor;
- D. Dryer recycle screw feeder conveyor (BAP-SC-025) 9" dia. X 7' long with 5-hp motor;
- E. Fabric collector (BAP-DC-136) equipped with the following: 4 collection banks, 4 high frequency vibrators each with ¼-hp motor, 7,873-sq.ft. of filtering area, and exhaust fan with 250-hp motor serving fabric collector and wet scrubber (item H). Filter bags with 5,424-sq.ft. of filtering are utilized when high efficiency bags are removed for maintenance;;
- F. Dust collector transfer screw conveyor (BAP-SC-023H) 9" dia. X 35.8' long with 3-hp motor;
- G. Dust transfer screw conveyor (BAP-SC-023G) 9" dia. X 17' long with 3-hp motor;
- H. Two stage wet scrubber (BAP-DC-137) with two 15-hp recirculation pumps.
- I. Dryer recycle screw conveyor (BAP-SC-368C) 14" dia. X 47.7' long with 10-hp motor;
- J. Emergency recycle dump screw conveyor (BAP-SC-356D) 24" dia. X 24' long with 15-hp motor;
- K. Product collection screw conveyor (BAP-SC-534B) 14" dia. X 40' long with 7.5-hp motor;
- L. Dryer dust collector collection screw conveyor (BAP-SC-023J) 9" dia. X 42' long with 3-hp motor;
- M. Emergency recycle dump pile on concrete pad.

OPERATIONAL CONDITIONS:

- 1. Each fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 2. Each fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
- 3. All conveyors shall be equipped with dust-tight covers. (Rule 210.1)
- 4. Fabric collector and wet scrubber each shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 5. Fabric collector shall all be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
- 6. Scrubber shall be equipped with liquid volumetric flow indicators. (Rule 210.1)
- 7. Particulate matter emissions from wet scrubber exhaust shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement)
- 8. Visible emissions from fabric collector/wet scrubber shall not exceed 5% opacity (¼ Ringelmann), excluding water vapor. (Rule 210.1 BACT Requirement)
- 9. Fabric dust collector volumetric exhaust flow rate shall not exceed 20,000 standard cubic feet per minute (scfm). (Rule 210.1)
- 10. Fabric dust collector and shall be in operation when associated equipment is operated. (Rule 210.1)
- 11. All piping, ducting, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)

Emission Unit 222 Permit Conditions

12. All conveyors transporting dried material shall be covered be leak-tight, have no visible emissions. (Rule 210.1)
13. Material collected in fabric dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
14. Boric acid added to emergency dump pad shall be recycled or disposed of prior to drying. (Rule 210.1 BACT Requirement)
15. Dryer burners shall be fired exclusively with public utility commission regulated quality natural gas. (Rule 210.1 BACT Requirement)
16. No more than 103.1-MMscf/year of natural gas shall be burned as fuel. (Rule 210.1)
17. Operator shall maintain annual records of fuel use. (Rule 210.1)
18. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
19. 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)
20. Emission from use of this equipment shall not 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:

Scrubber (dryer exhaust) stack shall be equipped with sampling ports (in accordance with California Air Resources Board Standards), sampling platform, access to sampling platforms, and utilities for sampling equipment to perform source-sampling operations. (Rule 108.1)

Dryer shall be tested according to test methods in Rule 425.2, Subsection VI.B and according to schedule in Rule 425.2, Subsection VI.C. (Rules 108.1 and 209)

Dryer shall be tested in accordance with Rule 425.2, utilizing an oxygen (O₂) correction level of 19%, and shall correspond to the following emission limits:

- a. NO_x and CO emissions shall be uncorrected if the measured O₂ exhaust concentration exceeds 19.0% by volume, and shall be corrected to 19% by volume if measured O₂ exhaust concentration exceeds 19% by volume;
- b. NO_x concentration = 1.06-parts per million volume basis (ppmv) @ 19% O₂;
- c. CO concentration = 14.86-ppmv @ 19% O₂.

Upon start-up dryer shall be tested for SO_x as SO₂ emissions in accordance with California Air Resources Board Method 6 or EPA Method 6 and calculated to pounds per hour.

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.01	grains/scf
	2.17	lb/hr
	52.15	lb/day
	9.52	ton/yr

Emission Unit 222 Permit Conditions

Sulfur Oxides (SO_x as SO₂):	0.01	lb/hr
	0.02	lb/day
	0.00	ton/yr

<u>Oxides of Nitrogen (NO_x as NO₂):</u>	0.14	lb/hr
	3.46	lb/day
	0.63	ton/yr

<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.06	lb/hr
	1.55	lb/day
	0.28	ton/yr

<u>Carbon Monoxide:</u>	1.25	lb/hr
	29.95	lb/day
	5.47	ton/yr

(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 documenting 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 209 and 210.1)

Emission Unit 223 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	223	Granubor II Production Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Granubor II Production Operation, including following equipment:

- A. Bucket elevator (BLK-EL-037) shared with PTO 1004006;
- B. Pneumatically controlled feed shut-off gate (GRB-GT-001);
- C. Feed screw conveyor (GRB-SC-001) 9" dia. X 5' long with 3-hp motor;
- D. Feed transfer chain conveyor No. 1 (GRB-CM-001) 18" wd. X 26' long with 3-hp motor;
- E. Feed transfer chain conveyor No. 2 (GRB-CM-002) 18" wd. X 97' long with 3-hp motor;
- F. Feed surge bin (GRB-BN-001);
- G. Pneumatically controlled surge bin shut-off gate (GRB-GT-002);
- H. Product (5 mole) compactor (GRB-AM-001) with 2 - 125-hp main and one 3-hp hydraulic drive motors;
- I. Vertical screw feeder (GRB-SC-002) with 40-hp motor;
- J. Magnetic separator (GRB-MG-001);
- K. Screw conveyor mixer (GRB-SC-003) 14" dia with 5-hp motor;
- L. Fabric collector discharge screw (GRB-SC-004) 9" dia. with 2-hp motor;
- M. Fabric collector (GRB-DC-01) and 6,000-acfm fan (GRB-FN-001) with 30-hp motor;
- N. Pneumatically controlled fabric collector double dump valve (GRB-DV-001);
- O. Transfer screw conveyor (GRB-SC-005), 16" dia with 7.5-hp motor;
- P. Pneumatically controlled solo No. 3 gate;
- Q. Product bucket elevator (GRB-EL-001) 17.8" wd. X 48" high with 7.5-hp motor;
- R. Product screen (GRB-SN-001) 80" wd. X 144" long with 7.5-hp motor;
- S. Pneumatically controlled product sampler (GRB-SP-001);
- T. Product conditioner, 40" dia., 160" long with 5-hp electric motor; diverter gage 12", on discharge chute from Product Conditioner;
- U. Oversized crusher (GRB-ML-002) with 40-hp motor;
- V. Silo feed bucket elevator (BLK-EL-122);
- W. Solids flowmeter (GRB-WD-003);
- X. Silo feed chain conveyor (GRB-CM-003) 18" wd. X 56.7' long with 3-hp motor;
- Y. Silos feed slide gate (GRB-GT-005) with 2-hp motor;
- Z. Product (5 mol) storage silo No. 1 (BLK-BN-232);
- AA. Pneumatically controlled silo No. 1 shut-off gate (GRB-GT-003);
- BB. Silo No.1 discharge screw feeder (GRB-SC-006) with 15-hp motor;
- CC. Product storage silo No. 2 (BLK-BN-233);
- DD. Pneumatically controlled silo No. 2 shut-off gate (GRB-GT-004);
- EE. Silo No.2 discharge screw feeder (GRB-SC-007) with 15-hp motor;
- FF. Silos draw-off belt conveyor (GRB-BC-004) 24" wd. X 89.8' long with 7.5-hp motor;
- GG. Bin vent dust collectors (GRB-DC-002E and GRB-DC-002F) serving storage silo GRB-BN-232;

Emission Unit 223 Permit Conditions

- HH. Bin vent dust collectors (GRB-DC-002C and GRB-DC-002D) serving storage silo GRB-BN-233;
II. Silo No.3 discharge screw feeder (BLK-SC-003), 24" dia. with 15-hp motor;
JJ. Bin vent dust collector (BLK-DC-300) with 175-acfm fan (BLK-FN-300) with 1.5-hp motor for silo No. 3;
KK. Arid-Dry Dehumidifier with a rating of 2,000 CFM.

OPERATIONAL CONDITIONS:

1. Fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
2. Fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
3. Particulate matter emissions from fabric collector exhaust shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement)
4. Visible emissions from fabric collectors shall not exceed 5% opacity (Ringelmann ¼). (Rule 210.1 BACT Requirement)
5. Fabric collector (GRB-DC-001) volumetric exhaust flow rate shall not exceed 6,000 standard cubic feet per minute (scfm). (Rule 210.1)
6. Fabric dust collectors shall be in operation when associated equipment is operated. (Rule 210.1)
7. All piping, ducting, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
8. All conveyors transporting dried material shall be covered be leak-tight, have no visible emissions. (Rule 210.1)
9. Material collected in fabric dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
10. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
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)
12. 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 and readily available. (Rule 210.1)

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:

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

<u>Fabric Collector (GRB-DC-001):</u>	0.01 gr/scf (Rule 210.1 BACT Requirement)
(6,000 scfm)	0.51 lb/hr
	12.34 lb/day
	2.25 ton/yr

Emission Unit 223 Permit Conditions

Fabric Collector (GRB-DC-002C): 0.01 gr/scf
 0.086 lb/hr
 2.06 lb/day
 0.38 ton/yr

Fabric Collector (GRB-DC-002D): 0.01 gr/scf
 0.086 lb/hr
 2.06 lb/day
 0.38 ton/yr

Fabric Collector (GRB-DC-002E): 0.01 gr/scf
 0.17 lb/hr
 4.11 lb/day
 0.75 ton/yr

Fabric Collector (GRB-DC-002F)U: 0.01 gr/scf
 0.17 lb/hr
 4.11 lb/day
 0.75 ton/yr

Fabric Collector (GRB-DC-300): 0.01 gr/scf
 0.01 lb/hr
 0.36 lb/day
 0.07 ton/yr

(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 documenting 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 228 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	228	Low-Use Water Pump with Diesel Engine

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Low-Use Water Pump with Diesel Engine, including following equipment:

Water pump driven by 302-Bhp EPA certified Tier 4 diesel fueled piston engine.

OPERATIONAL CONDITIONS:

1. Total hours of operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
2. Engine visible emissions shall be less than 5% opacity or Ringelmann No. $\frac{1}{4}$ during normal operation, except for not more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
3. 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)
4. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
5. Equipment shall be maintained according to the manufacturer's specifications to ensure compliance with emission limitations. (Rules 209 and 210.1)
6. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued. (Rule 210.1)
7. 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) Engine). (CCR Title 17, Sections 93115 – 93115.15)
8. Operating records of this equipment shall be maintained in format approved in writing by District and made available upon request of District personnel. Records shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, date(s) fuel was supplied, and engine maintenance check(s) including: air filters, fuel filters, oil filters, engine oil, exhaust system, coolant, and spark plugs (if so equipped). (Rule 210.1 & CCR Section 93115).
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 for a minimum of three years. (Rule 210.1)
10. 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 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. (Rules 108.1 and 209)

Emission Unit 228 Permit Conditions

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	3E-3 gm/bhp-hr (CARB Certification)
	2E-3 lb/hr
	0.05 lb/day
	2E-4 ton/yr

<u>Sulfur Oxides (SO_x as SO₂):</u>	3E-3 lb/hr
	0.07 lb/day
	3E-4 ton/yr

<u>Oxides of Nitrogen (NO_x as NO₂):</u>	1.36 gm/bhp-hr (CARB Certification)
	0.91 lb/hr
	21.81 lb/day
	0.09 ton/yr

<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.02 gm/bhp-hr (CARB Certification)
	0.02 lb/hr
	0.35 lb/day
	1E-3 ton/yr

<u>Carbon Monoxide:</u>	0.15 gm/bhp-hr (CARB Certification)
	0.10 lb/hr
	2.38 lb/day
	0.01 ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of five years. (Rule 210.1)

Emission Unit 267 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	267	Stand-by Secondary Crushing Unit

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Stand-by Secondary Crushing Unit, including following equipment:

- A. 0123-BN-001: MMD-500 Feed Hopper (Repurposed);
- B. DIS-BC-019: Crusher Feed Conveyor with 15-hp motor (Repurposed);
- C. 0123-MG-001: Tramp Iron Magnet (Repurposed);
- D. DIS-ML-020: MMD-500 Roll sizer with 200-hp motor (Repurposed);
- E. DIS-DC-020: Crusher Feed Dust Collector with 10-hp New York Blower model 18PLR fan (0123-FN-001), 2,960-cfm (Repurposed);
- F. DIS-SC-020: Discharge Screw Conveyor with 2-hp motor (Repurposed);
- G. DIS-BC-020: Overland Conveyor with 20-hp motor (Repurposed);
- H. DIS-BC-001: Fines belt conveyor with 25-hp motor (Repurposed);
- I. DIS-DC-003: Fabric Filters Northwest model 2000003 Dust collector with 25-hp New York Blower model Series 20GI fan DIS-FN-003 providing up to 12,000-cfm but operational at 2,200-cfm;
- J. DIS-SC-003: Discharge Screw Conveyor with 3-hp motor;
- K. DIS-BC-003: Fine Ore Bins Belt;
- L. DIS-DC-004: fabric collector with 16,190-cfm Chicago blower (DIS-FN-001) with 75-hp motor;
- M. DIS-SC-008: Discharge screw conveyor with 3-hp motor;
- N. DIS-SC-146: Screw conveyor to fine ore bins belt;

OPERATIONAL CONDITIONS:

- 1. Each fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 2. Each fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
- 3. All conveyors shall be equipped with dust-tight covers. (Rule 210.1)
- 4. There shall be no visible emissions from fabric collector and conveyors. (Rule 210.1)
- 5. Stand-by secondary crushing unit operation shall not exceed 2,000 hours/year without prior District approval. (Rule 210.1)
- 6. Process weight rate for secondary crusher shall not exceed 1,000 tons per hour without prior District approval. (Rule 210.1)
- 7. Visible emissions from vacuum system related piping, and connections shall not exceed 5% opacity or ¼ Ringelmann for 3 minutes in any one-hour. (Rule 210.1)
- 8. Flowrate on fabric collector DIS-DC-020 shall not exceed 2,960-cfm. (Rule 210.1)
- 9. Flowrate on fabric collector DIS-DC-003 shall not exceed 2,200-cfm. (Rule 210.1)
- 10. Flowrate on fabric collector DIS-DC-004 shall not exceed 16,190-cfm. (Rule 210.1)
- 11. Screw conveyors shall discharge collected dust back to process only at locations with existing ventilation hoods connected to existing dust control system. (Rule 209)
- 12. Fabric collectors shall be maintained in proper working order. (Rule 210.1)
- 13. Process shall not be operated unless emission control equipment is in operation. (Rules 210.1 and 209)

Emission Unit 267 Permit Conditions

14. Material removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
15. All material transfer points and storage bins shall be vented to dust collector. (Rule 209)
16. There shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)
17. Screen covers shall always be in place during operation. (Rule 210.1)
18. All exhaust ducts shall be connected to appropriate collection equipment. (Rule 210.1)
19. Free moisture content of ore shall be maintained at no less than 3% by weight. (Rule 401)
20. Collected dust dump hopper shall be maintained dust-tight. (Rule 210.1)
21. Ductwork connecting material drop points and ore storage bins shall be maintained in air-tight condition. (Rule 210.1)
22. Vacuum system, related piping, and connections shall be maintained "dust-tight"; equipment shall be maintained so as not to allow visible greater than 5% opacity or fugitive emissions. (Rule 210.1)
23. Vacuum system shall be operated with collection bags having no tears or similar damage. (Rule 210.1)
24. U.S. Borax, Inc. shall keep accurate daily records of process weight rates and make such records readily available to District upon request. (Rule 210.1)
25. Records of processing throughput shall be maintained and made available upon request for inspection. (Rule 210.1)
26. 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 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:

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

Particulate Matter (PM₁₀):

Fabric Collector (DIS-DC-020)	0.01	gr/scf
	0.25	lb/hr
	6.09	lb/day
	0.25	tons/yr
Fabric Collector (DIS-DC-004)	0.02	gr/scf
	2.78	lb/hr
	66.61	lb/day
	2.78	tons/yr
Fabric Collector (DIS-DC-003)	0.02	gr/scf
	1.08	lb/hr
	25.92	lb/day
	1.08	tons/yr

Emission Unit 267 Permit Conditions

(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 retained and made readily available to District for a period of five years. (Rule 210.1)

Emission Unit 268 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	268	Bag Rejecter

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Bag Rejecter, including following equipment:

- A. Bag Splitter with 5.12-hp motor;
- B. Lump Breaker with two 5-hp motors;
- C. Tubular Chain Conveyor with 5-hp motor;
- D. Big Bag (IBC) Unloader with 2-hp motor;
- E. Loading Spout with 1-hp motor; and
- F. Fabric Collector with 40-hp exhaust fan motor rated at 1200-acfm, 3-hp TEFC motor, and 25 bags totaling 236-ft² of filter area.

OPERATIONAL CONDITIONS:

- 1. Fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 2. Fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
- 3. Conveyors shall be equipped with dust-tight cover. (Rule 210.1)
- 4. Visible emissions from fabric collector and conveyors shall not exceed 5% opacity. (Rule 210.1)
- 5. Fabric collectors shall be maintained in proper working order. (Rule 210.1)
- 6. Process shall not be operated unless emission control equipment is in operation. (Rules 210.1 and 209)
- 7. Material removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 8. All material transfer points and storage bins shall be vented to dust collector. (Rule 209)
- 9. There shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)
- 10. Ductwork connecting material drop points shall be maintained in air-tight condition. (Rule 210.1)
- 11. Operation of bag rejecter system shall not exceed 8760 hours/year without prior District approval. (Rule 210.1)
- 12. U.S. Borax, Inc. shall keep accurate daily records of process weight rates and make such records readily available to District upon request. (Rule 210.1)

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 Unit 268 Permit Conditions

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

25S Fabric Collector	0.01	gr/scf
	0.10	lb/hr
	2.47	lb/day
	0.45	tons/yr

(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 documenting 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 275 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	275	Emergency Generator

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Generator, including following equipment:

250-kW electrical generator set, (Eq. No. 9842), driven by 398-bhp (297-kW) 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. 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)
4. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (low sulfur, 0.0015% by weight and low aromatic hydrocarbon, 20% by weight). (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 209)
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 of District personnel. Record shall include, at minimum, days and hours of operation, location of operation, amount of fuel oil supplied to this engine, and date(s), check(s) and certification(s) of injection timing. (Rule 210.1)
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)
10. Engine operation for maintenance and testing shall not exceed 30 hours per year without prior District approval. (Rule 210.1)
11. Engine operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)

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 Unit 275 Permit Conditions

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.15 gm/bhp-hr
	0.13 lb/hr
	3.16 lb/day
	0.01 ton/yr

<u>Sulfur Oxides (Sox as SO₂):</u>	0.004 lb/hr
	0.107 lb/day
	0.0004 ton/yr

<u>Oxides of Nitrogen (Nox as NO₂):</u>	2.8 gm/bhp-hr
	2.46 lb/hr
	58.98 lb/day
	0.25 ton/yr

<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.2 gm/bhp-hr
	0.18 lb/hr
	4.21 lb/day
	0.02 ton/yr

<u>Carbon Monoxide:</u>	2.28 lb/hr
	54.77 lb/day
	0.23 ton/yr

(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 documenting 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 276 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	276	Emergency Generator With Diesel Piston Engine

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Generator with Diesel Piston Engine, including following equipment:

125-kW electrical generator set, (Eq. No. 9882), driven by 181-bhp 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. 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)
4. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (low sulfur, 0.0015% by weight and low aromatic hydrocarbon, 20% by weight). (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 209)
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 of District personnel. Record shall include, at minimum, days and hours of operation, location of operation, amount of fuel oil supplied to this engine, and date(s), check(s) and certification(s) of injection timing. (Rule 210.1)
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)
10. Engine operation for maintenance and testing shall not exceed 30 hours per year without prior District approval. (Rule 210.1)
11. Engine operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)

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 Unit 276 Permit Conditions

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.15 gm/bhp-hr
	0.07 lb/hr
	1.72 lb/day
	0.01 ton/yr

<u>Sulfur Oxides (SO_x as SO₂):</u>	0.002 lb/hr
	0.06 lb/day
	0.0002 ton/yr

<u>Oxides of Nitrogen (NO_x as NO₂):</u>	2.8 gm/bhp-hr
	1.34 lb/hr
	32.15 lb/day
	0.13 ton/yr

<u>Volatile Organic Compounds (VOC):</u>	0.2 gm/bhp-hr
(as defined in Rule 210.1)	0.10 lb/hr
	2.30 lb/day
	0.01 ton/yr

<u>Carbon Monoxide:</u>	1.24 lb/hr
	29.86 lb/day
	0.12 ton/yr

(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 documenting 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 279 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	279	Outdoor Abrasive Blasting Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Outdoor Abrasive Blasting Operation, including following equipment:

- A. 3.5-cu.ft. Abrasive blast unit with hose, blast nozzle, and fixed feed tank, and
- B. CARB certified blast media.

OPERATIONAL CONDITIONS:

1. Material collected from abrasive blasting operation shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
2. Abrasive blasting operations shall be conducted within a permanent building unless steel or iron shot/grit is used exclusively, item to be blasted exceeds 8 feet in any dimension, or surface being blasted is situated at its permanent location or no further away than is necessary to allow blasting. (Calif. Code of Regulations Title 17, Sec 92000 through 92540)
3. Permissible outdoor blasting (except where steel or iron shot/grit is used) shall utilize wet abrasive blasting, hydroblasting, vacuum blasting, or abrasives certified for permissible dry outdoor blasting. (CCR Title 17, Sec 92500)
4. For stucco/concrete structures, abrasive blasting shall be performed by wet blasting, hydroblasting, or vacuum blasting with the following exceptions: Dry blasting with a certified abrasive may be used for:
 - a. Window and door returns and frames;
 - b. Eaves, overhangs, and ceilings;
 - c. Sweep abrasive blasting except for stucco surfaces;
 - d. Completely shrouded structures or blast areas that effectively control emissions;
 - e. Abrasive cleaning operations, other than aggregate exposure or paint removal related to new concrete construction or repair activity, if such operations are performed onsite.
5. For abrasive blasting conducted outside a permanent building, no air contaminant shall be discharged into atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann No. 2 or equivalent to 40% opacity. (CCR Title 17, Sec 92200)
6. For abrasive blasting conducted within any permanent building, no air contaminant shall be discharged into atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark or darker than Ringelmann No. 1 or equivalent to 20% opacity. (CCR Title 17, Sec 92200)
7. Abrasive blasting operation shall not exceed 2190-hours per year without prior District approval. (Rule 210.1)
8. No emissions shall cause injury, detriment, nuisance, annoyance or endanger comfort, repose, health, or safety of public or have natural tendency to cause injury or damage to business or property. (CH&SC, Sec 41700)

Emission Unit 279 Permit Conditions

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 on site and readily available. (Rule 210.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with 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 209)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

1.80 lb/day
0.33 tons/year

(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 documenting 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 282 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	282	Air Compressor

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Air Compressor, including following equipment:

Air compressor driven with, Tier 3, 440-bhp, 12.5L diesel piston engine with diesel particulate filter system.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with turbocharger, aftercooler, and diesel particulate filter. (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. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not equal or exceed 5% opacity or Ringelmann No. $\frac{1}{4}$ for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
4. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (low sulfur, 0.0015% by weight and low aromatic hydrocarbon, 20% by weight). (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 recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
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 of District personnel. Record shall include, at minimum, days and hours of operation, location of operation, amount of fuel oil supplied to this engine, and date(s), check(s) and certification(s) of injection timing. (Rule 210.1)
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)
10. Permittee shall comply with Rule 427, Section VI (Requirements for Engines Greater than 250-bhp), Section VII (Monitoring), and Section VIII.B and C (Administrative Requirements, Recordkeeping and Compliance Testing) for subject diesel piston engine. (Rule 427)
11. Permittee shall maintain monthly records of engine operation including quantity of fuel used, data related to NO_x emissions and cumulative hours of operation since last source test for a minimum of five years, and records shall be readily available for District inspection upon request. (Rule 427)
12. Engine operation for shall not exceed 5,000 hours per year without prior District approval. (Rule 210.1)

Emission Unit 282 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)

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.15 gm/bhp-hr; 17 CCR 93116
	0.02 lb/hr
	0.52 lb/day
	0.06 ton/yr

<u>Sulfur Oxides (SO_x as SO₂):</u>	0.01 lb/hr
	0.12 lb/day
	0.01 ton/yr

<u>Oxides of Nitrogen (NO₂):</u>	2.8 gm/bhp-hr; 17 CCR 93116
	2.72 lb/hr
	65.20 lb/day
	6.79 ton/yr

<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.2 gm/bhp-hr; 17 CCR 93116
	0.19 lb/hr
	4.66 lb/day
	0.49 ton/yr

<u>Carbon Monoxide:</u>	2.6 gm/bhp-hr; 17 CCR 93116
	2.52 lb/hr
	60.54 lb/day
	6.31 ton/yr

(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 documenting 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 283 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	283	Emergency Genrator Set

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Generator Set, including following equipment:

50-kW electrical generator set, driven by 85-bhp, diesel fueled piston engine.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with turbocharger and intercooler. (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. 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)
4. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (low sulfur, 0.0015% by weight and low aromatic hydrocarbon, 20% by weight). (Rule 210.1 BACT Requirement)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1 and Rule 209)
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 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) (Rules 209 and 210.1)
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)
10. Engine operation for maintenance and testing shall not exceed 50 hours per year without prior District approval. (Rule 210.1)
11. Engine operation for shall not exceed 200 hours per year without prior District approval. (Rule 210.1)

Emission Unit 283 Permit Conditions

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with 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 209)

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.22 gm/bhp-hr
	0.04 lb/hr
	0.99 lb/day
	0.004 ton/yr

<u>Sulfur Oxides (SO_x as SO₂):</u>	0.001 lb/hr
	0.02 lb/day
	0.0001 ton/yr

<u>Oxides of Nitrogen (NO₂):</u>	3.3 gm/bhp-hr
	0.62 lb/hr
	14.84 lb/day
	0.06 ton/yr

<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.2 gm/bhp-hr
	0.04 lb/hr
	0.90 lb/day
	0.004 ton/yr

<u>Carbon Monoxide:</u>	3.7 gm/bhp-hr
	0.69 lb/hr
	16.64 lb/day
	0.07 ton/yr

(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 documenting 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 289 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	289	Abrasive Blasting Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Abrasive Blasting Operation, including following equipment:

- A. 30-ft (L) x 16-ft (W) x 14-ft (H) blast room with double skinned work doors and screw assemblies;
- B. 13,940-cfm ABS Blast cartridge dust collector (ABS-DC-100), with 20-hp electric motor blower;
- C. 15-inch gravity type air wash abrasive separator;
- D. 6.5-cu. ft. blast pot assembly with abrasive cut-off switch, hose and blast nozzle;
- E. CARB certified blast media;
- F. 50-cu. ft. enclosed free-standing abrasive storage hopper;
- G. Enclosed material movement elevator with 3-hp motor; and
- H. 100-cu. ft. abrasive storage hopper.

OPERATIONAL CONDITIONS:

- 1. Fabric collector serving blast cabinet shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 2. Fabric collector serving blast cabinet shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
- 3. Visible emissions from fabric collector shall not exceed 5% opacity or Ringelmann No. ¼ for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
- 4. Particulate matter emissions from fabric collector exhaust shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement)
- 5. Equipment shall be maintained according to manufacturer's specifications, including periodic replacement and or cleaning of filters, to ensure compliance with emission limitations. (Rule 210.1)
- 6. All piping, duct work, and connections shall be leak-tight and shall have no visible emissions. (Rule 210.1)
- 7. Material collected in fabric dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 8. Fabric collector shall be in operation whenever blast cabinet is in operation. (Rule 210.1)
- 9. 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 on site and readily available. (Rule 210.1)
- 10. No emission shall cause injury, detriment, nuisance, or annoyance or endanger the comfort, repose, health or safety of any persons or have natural tendency to cause injury or damage to business or property. (Rule 419)

Emission Unit 289 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:

Cartridge Dust Collector @ 13,940-acfm

Particulate Matter (PM₁₀):

0.001	gr/scf
0.12	lb/hr
0.29	lb/day
0.04	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to the District for period of two years. (Rules 209 and 210.1)

Emission Unit 290 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	290	Portable Screening Unit

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Portable Screening Unit, including following equipment:

Portable screening unit powered by 129-bhp diesel fueled piston engine (permit exempt).

OPERATIONAL CONDITIONS:

1. Conveyors shall be covered, equipped with water sprays, or wetted sufficiently to prevent visible emissions as defined in operating conditions. (Rule 210.1)
2. Visible emissions from screening operation shall not exceed 10% opacity or Ringelmann No. ½ for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
3. Screening operation shall not exceed 12 hours per day (4,380 hours per year) without prior District approval. (Rule 210.1)
4. All conveyors shall be covered or equipped with water sprays, unless the material being transferred does not result in any visible particulate matter emissions. (Rule 210.1)
5. Water sprays shall be used on all stockpiled material to control fugitive particulate matter emissions, unless the stockpiled material does not result in any visible emissions. (Rule 210.1)
6. All transfer points shall be equipped with water sprays to control fugitive particulate matter emissions, unless there are no visible emissions from transfer points. (Rule 210.1)
7. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rule 210.1)
8. 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 427)
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 Sec 41700)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveals 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:

Emission Unit 290 Permit Conditions

Screening Operation:

<u>Particulate Matter (PM₁₀):</u>	11.35	lb/hr
	136.20	lb/day
	24.86	ton/yr

(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 documenting 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 294 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	294	Street Sweeper

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Street Sweeper, including following equipment:

Sweeper driven by 28-bhp diesel fueled engine.

OPERATIONAL CONDITIONS:

1. Sweeper operation shall not exceed 2900 hours per year without prior District Approval. (Rule 210.1)
2. Visible emissions from sweeping activity shall not exceed 20% opacity for more than 3 minutes in any 1 hour. (Rule 401)
3. Particulate matter emissions from sweeper collector exhaust shall not exceed 0.01-gr/scf. (Rule 210.1)
4. Sweeper collector exhaust shall have no visible emissions other than water vapor. (Rule 210.1)
5. Sweeper collector and dust filter shall be in use when associated equipment is operated. (Rule 210.1)
6. All piping, ducting, hatches, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
7. Material collected in sweeper collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
8. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
9. 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)
10. Emission from use of this equipment shall not 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 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 Unit 294 Permit Conditions

EMISSION LIMITS:

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

Particulate Matter (PM10):

0.01 gr/scf
0.10 lb/hr
0.79 lb/day
0.14 tons/year

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

Compliance with daily emission limits shall be verified by record keeping (Visible Emission Evaluation). Compliance with annual emission limits shall be demonstrated by records which sum facility emissions on a quarterly basis. All records shall be kept on site and made readily available to District personnel upon request. (Rules 209 and 210.1)

Emission Unit 296 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	296	Surface Coating Operation with Paint Spray Booth (Utility Shop)

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Surface Coating Operation with Paint Spray Booth, including following equipment:

- A. 22-ft. x 16-ft. x 34-ft. paint spray booth;
- B. Two (2) 5-hp blowers totally 38,600 scfm;
- C. Anest Iwata LPH-200 Low Pressure Spray Gun;
- D. 3M Accuspray ONE Spray Gun
- E. Seventy Two (72) 20-in. x 20-in. fiberglass filter pads.

OPERATIONAL CONDITIONS:

- 1. Paints spray booth shall be equipped with operational pressure gauge indicating pressure drop across filter area. (Rule 210.1 BACT Requirement)
- 2. Visible emissions shall not exceed 5% opacity ($\frac{1}{4}$ Ringelmann) for not more than 3 minutes in any one hour. (Rule 210.1)
- 3. Exhaust gas particulate matter concentration shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement)
- 4. Spray booth shall be used when coating objects which can be contained within this spray booth. (Rule 210.1)
- 5. Exhaust filters shall be replaced per manufacturer's recommendations to achieve optimum capture as indicated by differential pressure across filters. (Rule 210.1)
- 6. HVLP spray equipment shall be operated between 0.1 and 10 psig and with liquid supply pressure less than 50 psig. (Rules 410.4 and 410.4A)
- 7. Coating Application Methods (Rules 410.4 and 410.4A):
No person shall apply any coating to any metal part or product or any motor vehicle, mobile equipment, or associated parts and products unless one of the following application methods is used:
 - a. Brush, dip, flow, or roll coating conducted in accordance with manufacturer's recommendations;
 - b. Electrostatic or electrodeposition application conducted in accordance with manufacturer's recommendations;
 - c. HVLP spray equipment operated in accordance with manufacturer's recommendations;
 - d. Hand-held, non-refillable aerosol cans 18 oz. or less used to repair minor surface damage and imperfections, provided the area to be covered does not exceed 9 square feet per vehicle; or
 - e. Any alternative coating application method which has been demonstrated to achieve at least 65% transfer efficiency or equivalent efficiency of an HVLP and approved in writing by APCO.
- 8. Coating of Metal Parts and Products (Rule 410.4)
 - a. No person shall apply a coating to any metal part or product with a VOC content in excess of the following limits:

Emission Unit 296 Permit Conditions

**Content expressed in Grams per Liter (Pounds per Gallon)
Less Water and Exempt Compounds**

Limits for Miscellaneous Metal Parts and Products, Large Appliance Parts and Products, and Metal Furniture Coatings		
Coating Category	Baked	Air-Dried
All coatings except listed below	275 g/l (2.3 lb/gal)	340 g/l (2.8 lb/gal)
Camouflage	360 (3.0)	420 (3.5)
Electrical Insulating Varnish	420 (3.5)	420 (3.5)
Etching Filler	420 (3.5)	420 (3.5)
Extreme High Gloss	360 (3.0)	420 (3.5)
Extreme Performance	360 (3.0)	420 (3.5)
General, One Component	275 (2.3)	275 (2.3)
General, Multi-Component	275 (2.3)	340 (2.8)
Heat Resistant	360 (3.0)	420 (3.5)
High Performance Architectural	750 (6.2)	750 (6.2)
High Temperature	420 (3.5)	420 (3.5)
Metallic/Iridescent Coating	420 (3.5)	420 (3.5)
Military Specification	275 (2.3)	340 (2.8)
Mold-Seal	420 (3.5)	420 (3.5)
Pan Backing	420 (3.5)	420 (3.5)
Pretreatment Coating	420 (3.5)	420 (3.5)
Touch-up and Repair Coating	360 (3.0)	420 (3.5)
Silicone Release	420 (3.5)	420 (3.5)
Solar Absorbent	360 (3.0)	420 (3.5)
Solid Film Lubricant	880 (7.3)	880 (7.3)
Vacuum-Metalizing	420 (3.5)	420 (3.5)
Drum Coating, New, Exterior	340 (2.8)	340 (2.8)
Drum Coating, New, Interior	420 (3.5)	420 (3.5)
Drum Coating, Reconditioned, Exterior	420 (3.5)	420 (3.5)
Drum Coating, Reconditioned, Interior	510 (4.2)	510 (4.2)

9. All coatings applied to motor vehicles, mobile equipment, or associated parts and components are subject to requirements of Rule 410.4A.
10. Coating of Motor Vehicles and Mobile Equipment (Rule 410.4A):
 - a. All coatings subject to Rule 410.4A shall be applied within a permitted, properly maintained, and operational paint spray booth located at a site with proper city or county zoning;
 - b. No person shall apply a coating to any motor vehicle, mobile equipment, or its associated parts and components with a VOC regulatory content in excess of the following limits:

Emission Unit 296 Permit Conditions

VOC CONTENT LIMITS FOR MOTOR VEHICLE COATINGS
Content expressed in Grams per Liter (Pounds per Gallon)
Less Water and Exempt Compounds

Coating Category	VOC Limit
Adhesion Promoter	540 (4.5)
Cavity Wax	650 (5.4)
Clear Coating	250 (2.1)
Color Coating	420 (3.5)
Deadener	650 (5.4)
Gasket/Gasket Sealing Material	200 (1.7)
Lubricating Wax/Compound	700 (5.8)
Multi-Color Coating	680 (5.7)
Pretreatment Coating	660 (5.5)
Primer	250 (2.1)
Sealer	650 (5.4)
Single-Stage Coating	340 (2.8)
Specialty Coating	540 (4.5)
Temporary Protective Coating	60 (0.5)
Truck Bed Liner Coating	200 (1.7)
Trunk Interior Coating	650 (5.4)
Underbody Coating	650 (5.4)
Uniform Finish Coating	540 (4.5)
Any other coating type	250 (2.1)

- c. If anywhere on the container of any automotive coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a person, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in the table above, then the lowest VOC content limit shall apply.
11. Surface Preparation and Equipment Cleanup Requirements: (Rule 410.4 and Rule 410.4A) No person shall conduct surface preparation or equipment cleanup for activities subject to provisions of this Rule unless the following requirements are met:
- VOC content of surface preparation solvent shall not exceed 25 g/l (0.2 lb/gal);
 - Cleaning of Coatings Application Equipment: Solvents used for cleaning of coatings application equipment shall comply with the following limits:
 - VOC content of 950 g/L (7.9 lb/gal) or less; and
 - VOC composite partial pressure of 35mm Hg or less at 20oC (68oF).
 - Cleaning Devices and Methods: no person shall perform solvent cleaning operations unless one of the following cleaning devices or methods is used:

Emission Unit 296 Permit Conditions

- 1.) Wipe cleaning;
 - 2.) Spray bottles or containers of 16 fluid ounces or less from which solvents are applied without a propellant induced force;
 - 3.) Cleaning equipment having a closed solvent container during cleaning operations except when depositing and removing objects to be cleaned, and closed during nonoperation except during maintenance and repair of the cleaning equipment itself;
 - 4.) Remote reservoir cold cleaner operation in conformance with Rule 410.3;
 - 5.) System totally enclosing spray guns, cups, nozzles bowls, and other parts during washing, rinsing, and draining procedures;
 - 6.) Non-atomized solvent flow method collecting cleaning solvent in a container or a collection system closed except for solvent collection openings and, if necessary, openings to avoid pressure build-up inside the container; or
 - 7.) Solvent flushing method discharging solvent into a closed container, except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container. Discharged solvent from such equipment shall be collected in containers without atomizing into open air. Solvent may be flushed through system by air or hydraulic pressure, or by pumping.
12. Storage and Disposal Requirements: Regardless of VOC content, all VOC-containing materials used in solvent cleaning operations shall be stored in non-absorbent, vapor-tight containers that are kept closed at all times except when filling or emptying. (Rules 410.4 and 410.4A)
13. Not more than 1½ gallons of any photochemically reactive solvent as defined in Rule 410.X, or material containing more than 1½ gallons of any such photochemically reactive solvent, shall be disposed into the atmosphere during any one day. (Rule 410.2)
14. Record Keeping Requirements (Rules 410.4 and Rule 410.4A):
Any operator that uses coatings or solvents shall maintain and have the following available on site at all times:
- a. Current list of all VOC containing products in use that includes any data necessary to evaluate compliance, including but not limited to the following, as applicable:
 - 1.) Material name and manufacturer's identification;
 - 2.) Application method;
 - 3.) Material type and specific use instructions;
 - 4.) Specific mixing instructions; and
 - 5.) VOC actual and VOC regulatory for coatings applied, or VOC content for solvents.
 - b. Daily coating and solvent use records, including the following information for each:
 - 1.) Volume of each coating/solvent mix ratio;
 - 2.) VOC content in grams/liter (or pounds/gallon) as applied/used;
 - 3.) Volume of each coating/solvent in liters (or gallons) applied/used;
 - 4.) Type and amount of solvent used for cleanup and surface preparation; and
 - 5.) If purchase records are used to determine the amount of solvents used, then records and manifests of the amounts of solvents disposed of or sent to a recycler must also be maintained and made available to the APCO upon request.
 - c. Current manufacturer specification sheets, material safety data sheets, technical data sheets, or air quality data sheets, which list the VOC actual for coatings and VOC regulatory for coatings of each ready-to-spray coating (based on the manufacturer's stated mix ratio), and VOC content of each solvent;
 - d. Purchase records identifying the name, type, and volume of coatings and solvents shall be maintained;

Emission Unit 296 Permit Conditions

- e. Daily records of differential pressure gauge reading shall be kept during periods of VOC emission producing activities to demonstrate continuous operation and compliance; and
 - f. Records required by this rule shall be retained for a minimum of three years and made available to the APCO upon request.
15. Prohibition of Specification (Rules 410.4 and 410.4A): No person shall solicit or require for use or specify application of a coating if such use or application results in a violation of provisions of Rules 410.4 or 410.4A. This prohibition shall apply to all written or oral contracts under terms of which any coating subject to provisions of Rules 410.4 or 410.4A is to be applied at any physical location within the District.
16. Surface coating operations shall not discharge quantities of air contaminants or other material which:
- a. Cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or
 - b. Endanger the comfort, repose, health, or safety of any such persons or the public; or
 - c. Cause or have a natural tendency to cause injury or damage to business or property. (Rule 419)
17. Coatings containing chromium compounds shall not be spray applied. Roll, dip, or brush applications may be used. (Rule 419 and CH&SC 41700)
18. Coatings containing hexavalent chromium or cadmium shall not be used for the coating of motor vehicles and/or mobile equipment. (Title 17 CCR, §93112)

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:

<u>Particulate Matter (PM₁₀):</u>	1.16 lb/day
	0.01 ton/year

<u>Volatile Organic Compounds (VOC):</u>	13.87 lb/day
<u>(As Defined in Rule 210.1)</u>	0.07 ton/year

(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 documenting 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 297 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	297	Pond Pump

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Pond Pump, including following equipment:

Pump driven by 74-bhp, Certified Tier 4 final diesel fueled piston engine.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with turbocharger and charge air cooler. (Rule 210.1 BACT Requirement)
2. Elapsed time meters 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. Pond pump operation shall not exceed 5000 hours per year without prior District approval. (Rule 210.1)
5. Fuel for diesel piston engine shall conform to CARB 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 be more than 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 gr/ft³ of gas at standard conditions. (Rule 404.1)
8. The engine shall comply with the requirements specified in the ATCM for new stationary prime diesel-fueled engines. (Title 17, CCR Section 93115 - 93115.15)
9. Owner/Operator shall service engine in accordance with the NO_x minimization maintenance schedule required by Rule 427.V. (Rule 427)
10. Equipment shall be maintained according to the manufacturer's specifications to ensure compliance with emission limitations. (Rule 210.1)
11. 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)
12. Operating record of this equipment shall be maintained in format approved in writing by District kept for a 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 210.1).
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 Section 41700)

Emission Unit 297 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 209)

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.01 g/bhp-hr
	0.002 lb/hr
	0.06 lb/day
	0.01 ton/year

<u>Oxides of Sulfur (SO_x as SO₂):</u>	0.001 lb/hr
	0.02 lb/day
	0.002 ton/year

<u>Oxides of Nitrogen (NO_x):</u>	2.41 g/bhp-hr
	0.39 lb/hr
	9.43 lb/day
	0.98 ton/year

<u>Volatile Organic Compounds (VOC):</u>	0.13 g/bhp-hr
	0.02 lb/hr
	0.50 lb/day
	0.05 ton/year

<u>Carbon Monoxide (CO):</u>	1.49 g/bhp-hr
	0.24 lb/hr
	5.84 lb/day
	0.61 ton/year

(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 documenting 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 three years. (Rule 210.1)

Emission Unit 298 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	298	Pond Pump

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Pond Pump, including following equipment:

Pump driven by 74-bhp, Certified Tier 4F diesel fueled piston engine.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with turbocharger and charge air cooler. (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. Pumping operation shall not exceed 5,000 hours per year without prior District approval. (Rule 210.1)
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/ft³ 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, Sections 93115 – 93115.15)
9. Equipment shall be maintained according to the 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 a readily available format. (Rule 427)
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. No emission resulting from the 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. 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 Section 41700)

Emission Unit 298 Permit Conditions

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal 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 the following limits:

<u>Particulate Matter (PM₁₀):</u>	0.01 g/bhp-hr
	0.002 lb/hr
	0.058 lb/day
	0.006 ton/year

<u>Oxides of Sulfur (SO_x as SO₂):</u>	0.001 lb/hr
	0.02 lb/day
	0.002 ton/year

<u>Oxides of Nitrogen (NO_x):</u>	2.41 g/bhp-hr
	0.39 lb/hr
	9.43 lb/day
	0.98 ton/year

<u>Volatile Organic Compounds (VOC):</u>	0.13 g/bhp-hr
	0.02 lb/hr
	0.51 lb/day
	0.05 ton/year

<u>Carbon Monoxide (CO):</u>	1.49 g/bhp-hr
	0.24 lb/hr
	5.83 lb/day
	0.61 ton/year

(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 documenting 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 three years. (Rule 210.1)

Emission Unit 299 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	299	On-Site Portable Emergency Pump

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: On-Site Portable Emergency Pump, including following equipment:

Pump, driven by 73.8-bhp, Tier 4 (2018), diesel fueled piston engine.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with turbocharger and charge air cooler. (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. Total hours of operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
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/ft³ 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, Sections 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 recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (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)

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 Unit 299 Permit Conditions

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.015	gm/bhp-hr
	0.002	lb/hr
	0.058	lb/day
	2x10 ⁻⁴	ton/yr

<u>Sulfur Oxides (SO_x as SO₂):</u>	0.001	lb/hr
	0.020	lb/day
	1x10 ⁻⁴	ton/yr

<u>Oxides of Nitrogen (NO_x as NO₂):</u>	2.41	gm/bhp-hr
	0.39	lb/hr
	9.41	lb/day
	0.39	ton/yr

<u>Volatile Organic Compounds (VOC):</u>	0.13	gm/bhp-hr
(as defined in Rule 210.1)	0.02	lb/hr
	0.51	lb/day
	0.003	ton/yr

<u>Carbon Monoxide:</u>	1.49	gm/bhp-hr
	0.24	lb/hr
	5.81	lb/day
	0.024	ton/yr

(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 documenting 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 300 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1004	300	On-Site Portable Emergency Pump

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: On-Site Portable Emergency Pump, including following equipment:

Pump, driven by 74 bhp, Tier 4, diesel fueled piston engine with turbocharger, and after cooler.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with turbocharger and charge air cooler. (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. Total hours of operation shall not exceed 8,760 hours per year without prior District approval. (Rule 210.1)
5. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not 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/ft³ of gas at standard conditions. (Rule 404.1)
7. 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)
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) Engine). (CCR Title 17, Sections 93115 – 93115.15)
9. Equipment shall be maintained according to the manufacturer's specifications to ensure compliance with emission limitations. (Rules 209 and 210.1)
10. Permittee shall comply with Rule 427, Section V (Requirements for Engine Greater than 50-bhp) and Section VIII (Administrative Requirements) for subject diesel fueled piston engine. (Rule 427)
11. Permittee shall maintain an engine service log demonstrating compliance with Section V of Rule 427 for at least two years and make such log readily available to District personnel upon request. (Rule 427)
12. In the event that the NO_x minimization maintenance schedule conflicts with a requirement of the manufacturer, defer to the manufacturer's requirements. (Rule 210.1)
13. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rule 210.1)
14. 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 a readily available format. (Rule 210.1)

Emission Unit 300 Permit Conditions

15. No emission resulting from the 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 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 emissions rate of each air contaminant from this emission unit shall not exceed the following limits:

<u>Particulate Matter (PM₁₀):</u>	0.015	gm/bhp-hr (CARB Certificate)
	2E-3	lb/hr
	0.06	lb/day
	0.01	ton/yr

<u>Sulfur Oxides (SO_x as SO₂):</u>	1E-3	lb/hr
	0.02	lb/day
	3E-3	ton/yr

<u>Oxides of Nitrogen (NO_x as NO₂):</u>	2.41	gm/bhp-hr (CARB Certificate)
	0.39	lb/hr
	9.43	lb/day
	1.72	ton/yr

<u>Volatile Organic Compounds (VOC):</u>	0.13	gm/bhp-hr (CARB Certificate)
(as defined in Rule 210.1)	0.02	lb/hr
	0.50	lb/day
	0.09	ton/yr

<u>Carbon Monoxide:</u>	1.49	gm/bhp-hr (CARB Certificate)
	0.24	lb/hr
	5.84	lb/day
	1.07	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of three years. (Rule 210.1)

Emission Unit 301 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1004	301	On-Site Portable Emergency Pump

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: On-Site Portable Emergency Pump, including following equipment:

Pump, driven by 73.8-bhp, Tier 4, diesel fueled piston engine.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with turbocharger and charge air cooler. (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. Total hours of operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
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/ft³ 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, Sections 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 recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (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)

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 Unit 301 Permit Conditions

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.015	gm/bhp-hr
	0.002	lb/hr
	0.058	lb/day
	2x10 ⁻⁴	ton/yr

<u>Sulfur Oxides (SO_x as SO₂):</u>	0.001	lb/hr
	0.020	lb/day
	1x10 ⁻⁴	ton/yr

<u>Oxides of Nitrogen (NO_x as NO₂):</u>	2.41	gm/bhp-hr
	0.39	lb/hr
	9.41	lb/day
	0.39	ton/yr

<u>Volatile Organic Compounds (VOC):</u>	0.13	gm/bhp-hr
(as defined in Rule 210.1)	0.02	lb/hr
	0.51	lb/day
	0.003	ton/yr

<u>Carbon Monoxide:</u>	1.49	gm/bhp-hr
	0.24	lb/hr
	5.81	lb/day
	0.024	ton/yr

(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 documenting 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 303 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	303	Portable Dry Bulk Loading System

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Portable Dry Bulk Loading System, including the following equipment:

- A. Mobile dry bulk loading equipment, with conveyor belt driven by a 5-hp electric motor and an extension/retraction mechanism driven by a 2-hp electric motor.
- B. Coaxial, retractable loading spout ventilated to existing fabric collector BAP-DC-123 (listed on Permit No. 1004064).
- C. Coaxial, Retractable loading spout ventilated to existing fabric collector SHP-DC-119 (listed on Permit No.'s 1004008, 071).

OPERATIONAL CONDITIONS:

1. Visible emissions shall not exceed 5% percent opacity for more than three minutes in any one hour. (Rule 210.1 BACT Requirement)
2. Process weight rate shall not exceed 210 tons per hour at Boric Acid Plant railcar loadout or 1,600 tons per day at 5 Mol truck loadout without prior District approval. (Rule 210.1)
3. Dust collector shall be in operation when associated equipment is operated. (Rule 210.1)
4. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 209)
5. Equipment shall be maintained according to the manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1)
6. No emission resulting from the 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)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector SHP-DC-119	0.01	gr/scf (Rule 210.1 BACT Requirement)
(@ 30,750 acfm, 27,821 scfm)	2.40	lb/hr
*shared with permits 1004008	57.66	lb/day
& '071	10.52	ton/yr

Emission Unit 303 Permit Conditions

Fabric Collector BAP-DC-123	0.01	gr/scf (Rule 210.1 BACT Requirement)
(@ 4,700 acfm, 4,252 scfm)	0.37	lb/hr
*shared with permit 1004064	8.81	lb/day
	1.61	ton/yr
Fugitive	0.35	lb/hr
	8.32	lb/day
	0.49	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be maintained and made readily available to District for a period of five years. (Rule 210.1)

Emission Unit 304 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	304	Back-up Compressor

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Back-up Compressor, including the following equipment:

1600 CFM compressor driven by 540-bhp Certified Tier 4 final diesel fueled piston engine.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with turbocharger, charge air cooler, exhaust gas recirculation, periodic trap oxidizer, oxidation catalyst, and selective catalytic reduction. (Rule 210.1 BACT Requirement)
2. Owner/Operator shall install, operate, and maintain one of the following: (Rule 427):
 - a. Automatic combustion controls; or
 - b. Analytical equipment and/or procedures or sensing devices indicating exhaust gas concentrations of oxides of nitrogen and carbon monoxide, and flow rate of any reducing liquids or gases added to exhaust gases for operation of catalyst system.
3. Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (Rule 210.1)
4. 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)
5. Compressor operation shall not exceed 2500 hours per year without prior District approval. (Rule 210.1)
6. 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)
7. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not be more than 5% opacity (Ringelmann No. $\frac{1}{4}$) for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
8. Exhaust gas particulate matter concentration shall not exceed 0.1 gr/ft³ of gas at standard conditions. (Rule 404.1)
9. The engine shall comply with the requirements specified in the ATCM for new stationary prime diesel-fueled engines. (Title 17, CCR Sections 93115 - 93115.15)
10. Equipment shall be maintained according to the manufacturer's specifications to ensure compliance with emission limitations. (Rule 210.1)
11. 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 a readily available format. (Rule 210.1)

Emission Unit 304 Permit Conditions

12. Owner/operator shall maintain engine operating log with monthly records of the following information: total hours of operation, type and quantity of fuel used, cumulative hours of operation since last source test, and any data related to NO_x emissions. This information shall be maintained for a period of at least five years and made readily available to District personnel. (Rule 427)
13. No emission resulting from the 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 Section 41700)

COMPLIANCE TESTING REQUIREMENTS:

Engine shall be tested for compliance with the requirements of District Rule 427.VI.C every 2 years or 8760 hours of operation (whichever is shorter), in accordance with the approved testing procedures listed in District Rule 427.IX. (Rule 427)

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

<u>Particulate Matter (PM₁₀):</u>	0.01	g/bhp-hr (ATCM Requirement)
	0.02	lb/hr
	0.43	lb/day
	0.02	ton/year
<u>Oxides of Sulfur (SO_x as SO₂):</u>	0.006	lb/hr
	0.14	lb/day
	0.01	ton/year
<u>Oxides of Nitrogen (NO_x as NO₂):</u>	0.30	g/bhp-hr (ATCM Requirement)
	0.36	lb/hr
	8.52	lb/day
	0.44	ton/year
<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.14	g/bhp-hr (ATCM Requirement)
	0.17	lb/hr
	4.05	lb/day
	0.21	ton/year
<u>Carbon Monoxide (CO):</u>	2.6	g/bhp-hr (ATCM Requirement)
	3.11	lb/hr
	74.57	lb/day
	3.88	ton/year

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

Emission Unit 304 Permit Conditions

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

SPECIAL CONDITIONS:

- aa. Upon issuance of Permit No. 1004304, Permit No. 1004277A shall be surrendered to the District and equipment listed on Permit No. 1004277A shall be removed from service

Emission Unit 307 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1004	307	Portable Stacker

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Portable Stacker, including the following equipment:

- A. Tesab, Model Trackstack 8542TBF, (self-propelled) portable radial stacker, powered by 131-bhp Caterpillar, Model C4.4 (Tier 4), diesel fueled engine (permit exempt mobile engine); and
- B. Outdoor Storage Piles.

OPERATIONAL CONDITIONS:

- 1. Visible emissions from portable stacker operation and ore storage piles shall not exceed 5% opacity or Ringelmann No. ½ for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement & Rule 422 Subpart OOO)
- 2. Operation of portable stacker shall not exceed 500 tons/hour, 12 hours per day, and 4,380 hours per year without prior District approval. (Rule 210.1)
- 3. Sustained footprint area for storage piles shall not exceed 140 acres without prior District approval. (Rule 210.1)
- 4. Conveyor transfer points and stockpiles shall be covered, equipped with water sprays, or wetted sufficiently to prevent visible emissions as defined in operating condition 1. (Rule 210.1)
- 5. Equipment shall be maintained according to the manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 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 a readily available format. (Rule 210.1)
- 7. No emission resulting from the 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 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. (Rules 108.1 and 209)

EMISSION LIMITS:

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

Emission Unit 307 Permit Conditions

Particulate Matter (PM₁₀):

(Material Handling/Deposition)

0.004 lb/ton
2.00 lb/hr
24.00 lb/day
4.38 ton/yr

(Stockpile Wind Erosion)

0.88 lb/hr
21.21 lb/day
3.87 ton/yr

Total Operation:

45.21 lb/day
8.25 ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of two years. (Rule 210.1)

Emission Unit 311 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	311	Street Sweeper

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Street Sweeper, including the following equipment:

- A. Tennant, Model S30, sweeper with vacuum dust collector; and
- B. 24.8-hp diesel fueled engine (Permit Exempt).

OPERATIONAL CONDITIONS:

- 1. Sweeper operation shall not exceed 2920 hours per year without prior District Approval. (Rule 210.1)
- 2. Visible emissions from sweeping activity shall not exceed 20% opacity for more than 3 minutes in any 1 hour. (Rule 401)
- 3. Particulate matter emissions from sweeper collector exhaust shall not exceed 0.01-gr/scf. (Rule 210.1)
- 4. Sweeper collector exhaust shall have no visible emissions other than water vapor. (Rule 210.1)
- 5. Sweeper vacuum collector and dust filter shall be in use when associated equipment is operated. (Rule 210.1)
- 6. All piping, ducting, hatches, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
- 7. Material collected in sweeper collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 8. Equipment shall be maintained according to the manufacturer's specifications. (Rules 210.1 and 209)
- 9. 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 a readily available format. (Rule 210.1)
- 10. Emission from use of this equipment shall not 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)

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

0.01 gr/scf
0.12 lb/hr
0.94 lb/day
0.17 tons/year

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

Emission Unit 311 Permit Conditions

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

SPECIAL CONDITIONS:

- aa. Should visible emissions from sweeping activity exceed 20% opacity for more than 3 minutes in any 1 hour during inspection, water sprays shall be installed on sweeper and utilized during sweeping activity. (Rules 209, 401)

Emission Unit 314 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	314	Floor Sweeper

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Floor Sweeper, including the following equipment:

Battery powered, ride-on sweeper equipped with the following dust control system components: dust suppression skirts, wet suppression, Perma pre filter, cyclone pre-filter, and HEPA cartridge style filter with shaker cleaning mechanism. (Eq. No. 9814)

OPERATIONAL CONDITIONS:

1. Sweeper operation shall not exceed 2920 hours per year without prior District Approval. (Rule 210.1)
2. Visible emissions from sweeping activity shall not exceed 20% opacity for more than 3 minutes in any 1 hour. (Rule 401)
3. Visible emissions from sweeper dust collection system exhaust shall have no visible emissions. (Rule 210.1)
4. Sweeper collector shall be in use when associated equipment is operated. (Rule 210.1)
5. Fabric dust collector volumetric exhaust flow rate shall not exceed 350 standard cubic feet per minute (scfm). (Rule 210.1)
6. All piping, ducting, hatches, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
7. Material collected in sweeper collector shall be disposed of in a manner preventing entrainment in atmosphere. (Rule 210.1)
8. Equipment shall be maintained according to the manufacturer's specifications. (Rules 210.1 and 209)
9. 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 a readily available format.(Rule 210.1)
10. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or the public. (Rule 419 and CH&SC, Sec 41700)

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. (Rules 108.1 and 209)

Emission Unit 314 Permit Conditions

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.01	grains/scf
	0.03	lb/hr
	0.72	lb/day
	0.04	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of five years. (Rule 210.1)

Emission Unit 315 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	315	Floor Sweeper

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Floor Sweeper, including the following equipment:

Battery powered, ride-on sweeper equipped with the following dust control system components: dust suppression skirts, wet suppression, Perma pre filter, cyclone pre-filter, and HEPA cartridge style filter with shaker cleaning mechanism. (Eq. No. 9815)

OPERATIONAL CONDITIONS:

1. Sweeper operation shall not exceed 2920 hours per year without prior District Approval. (Rule 210.1)
2. Visible emissions from sweeping activity shall not exceed 20% opacity for more than 3 minutes in any 1 hour. (Rule 401)
3. Visible emissions from sweeper dust collection system exhaust shall have no visible emissions. (Rule 210.1)
4. Sweeper collector shall be in use when associated equipment is operated. (Rule 210.1)
5. Fabric dust collector volumetric exhaust flow rate shall not exceed 350 standard cubic feet per minute (scfm). (Rule 210.1)
6. All piping, ducting, hatches, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
7. Material collected in sweeper collector shall be disposed of in a manner preventing entrainment in atmosphere. (Rule 210.1)
8. Equipment shall be maintained according to the manufacturer's specifications. (Rules 210.1 and 209)
9. 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 a readily available format. (Rule 210.1)
10. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or the public. (Rule 419 and CH&SC, Sec 41700)

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. (Rules 108.1 and 209)

Emission Unit 315 Permit Conditions

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.01	grains/scf
	0.03	lb/hr
	0.72	lb/day
	0.04	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of five years. (Rule 210.1)

Emission Unit 316 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	316	Industrial Vacuum Unit

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Industrial Vacuum Unit, including the following equipment:

Industrial vacuum consisting of a powerhead, material collection hopper, support frame and airlift. The vacuum is powered by 30-hp electric motor and equipped with three stage particulate material separation (Eq. No. SN HV-7146).

OPERATIONAL CONDITIONS:

1. Industrial vacuum operation shall not exceed 2080 hours per year without prior District Approval. (Rule 210.1)
2. Visible emissions from sweeping activity shall not exceed 20% opacity for more than 3 minutes in any 1 hour. (Rule 401)
3. Visible emissions from dust collection system exhaust shall have no visible emissions. (Rule 210.1)
4. Fabric dust collector volumetric exhaust flow rate shall not exceed 540 standard cubic feet per minute (scfm). (Rule 210.1)
5. All piping, ducting, hatches, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
6. Material collected in dust collector shall be disposed of in a manner preventing entrainment in atmosphere. (Rule 210.1)
7. Equipment shall be maintained according to the manufacturer's specifications. (Rules 210.1 and 209)
8. 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 a readily available format. (Rule 210.1)
9. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or the public. (Rule 419 and CH&SC, Sec 41700)

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. (Rules 108.1 and 209)

Emission Unit 316 Permit Conditions

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.014	grains/scf
	0.06	lb/hr
	1.56	lb/day
	0.07	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of five years. (Rule 210.1)

Emission Unit 317 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	317	Industrial Vacuum Unit

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Industrial Vacuum Unit, including the following equipment:

Industrial vacuum consisting of a powerhead, material collection hopper, support frame and airlift. The vacuum is powered by 30-hp electric motor and equipped with three stage particulate material separation (Eq. No. SN HV-6096).

OPERATIONAL CONDITIONS:

1. Industrial vacuum operation shall not exceed 2080 hours per year without prior District Approval. (Rule 210.1)
2. Visible emissions from sweeping activity shall not exceed 20% opacity for more than 3 minutes in any 1 hour. (Rule 401)
3. Visible emissions from dust collection system exhaust shall have no visible emissions. (Rule 210.1)
4. Fabric dust collector volumetric exhaust flow rate shall not exceed 540 standard cubic feet per minute (scfm). (Rule 210.1)
5. All piping, ducting, hatches, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
6. Material collected in dust collector shall be disposed of in a manner preventing entrainment in atmosphere. (Rule 210.1)
7. Equipment shall be maintained according to the manufacturer's specifications. (Rules 210.1 and 209)
8. 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 a readily available format. (Rule 210.1)
9. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or the public. (Rule 419 and CH&SC, Sec 41700)

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. (Rules 108.1 and 209)

Emission Unit 317 Permit Conditions

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.014	grains/scf
	0.06	lb/hr
	1.56	lb/day
	0.07	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of five years. (Rule 210.1)

Emission Unit 318 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1004	318	Portable Industrial Vacuum Unit

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Portable Industrial Vacuum Unit, including the following equipment:

Trailer-mounted industrial vacuum equipped with first stage cyclonic separation, blower filter, and baghouse. Unit is powered by 156-bhp diesel piston engine (EPA certified Tier 4).

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with turbocharger and charge air cooler. (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. Industrial vacuum equipped with diesel engine operation shall not exceed 8760 hours per year without prior District Approval. (Rule 210.1)
5. Visible emissions from dust collection system exhaust shall have no visible emissions. (Rule 210.1)
6. Fabric dust collector volumetric exhaust flow rate shall not exceed 3,660 standard cubic feet per minute (scfm). (Rule 210.1)
7. All piping, ducting, hatches, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
8. Material collected in dust collector shall be disposed of in a manner preventing entrainment in atmosphere. (Rule 210.1)
9. Equipment shall be maintained according to the manufacturer's specifications. (Rules 210.1 and 209)
10. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
11. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
12. 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)
13. 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) Engine). (CCR Title 17, Sections 93115 – 93115.15)
14. Equipment shall be maintained according to the manufacturer's specifications to ensure compliance with emission limitations. (Rules 209 and 210.1)
15. Permittee shall maintain an engine service log demonstrating compliance with Section V of Rule 427 for at least two years and make such log readily available to District personnel upon request. (Rule 427)

Emission Unit 318 Permit Conditions

16. In the event that the NO_x minimization maintenance schedule conflicts with a requirement of the manufacturer, defer to the manufacturer's requirements. (Rule 210.1)
17. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued. (Rule 210.1)
18. 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 a readily available format. (Rule 210.1)
19. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or the public. (Rule 419 and CH&SC, Sec 41700)

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. (Rules 108.1 and 209)

EMISSION LIMITS:

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

Vacuum Dust Collector:

<u>Particulate Matter (PM₁₀):</u>	0.005	grains/scf
	0.16	lb/hr
	3.81	lb/day
	0.69	ton/yr

Diesel Engine:

<u>Particulate Matter (PM₁₀):</u>	0.01	gm/bhp-hr (ATCM requirement)
	3E-3	lb/hr
	0.08	lb/day
	0.02	ton/yr

Sulfur Oxides (SO_x as SO₂):

1E-3	lb/hr
0.03	lb/day
0.01	ton/yr

Oxides of Nitrogen (NO_x as NO₂):

0.30	gm/bhp-hr (ATCM requirement)
0.10	lb/hr
2.48	lb/day
0.45	ton/yr

Volatile Organic Compounds (VOC):
(as defined in Rule 210.1)

0.14	gm/bhp-hr (ATCM requirement)
0.05	lb/hr
1.16	lb/day
0.21	ton/yr

Emission Unit 318 Permit Conditions

<u>Carbon Monoxide:</u>	3.7	gm/bhp-hr (CARB Certificate)
	1.27	lb/hr
	30.54	lb/day
	5.57	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of five years. (Rule 210.1)

Emission Unit 319 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	319	Industrial Vacuum Truck

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Industrial Vacuum Truck, including the following equipment:

Vacuum truck powered with onboard 450-bhp diesel piston engine (permit exempt mobile engine) and equipped with first stage pre-filter, cyclone chamber, and baghouse.

OPERATIONAL CONDITIONS:

1. Industrial vacuum operation shall not exceed 8,760 hours per year without prior District Approval. (Rule 210.1)
2. Visible emissions from dust collection system exhaust shall have no visible emissions. (Rule 210.1)
3. Fabric dust collector volumetric exhaust flow rate shall not exceed 6,300 standard cubic feet per minute (scfm). (Rule 210.1)
4. All piping, ducting, hatches, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
5. Material collected in dust collector shall be disposed of in a manner preventing entrainment in atmosphere. (Rule 210.1)
6. Equipment shall be maintained according to the manufacturer's specifications. (Rules 210.1 and 209)
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 a readily available format. (Rule 210.1)
8. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or the public. (Rule 419 and CH&SC, Sec 41700)

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. (Rules 108.1 and 209)

Emission Unit 319 Permit Conditions

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.01	grains/scf
	0.54	lb/hr
	12.96	lb/day
	2.36	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of five years. (Rule 210.1)

Emission Unit 320 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	320	Industrial Vacuum Unit

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Industrial Vacuum Unit, including the following equipment:

Industrial vacuum consisting of a powerhead, material collection hopper, support frame and airlift. Powered by 30-hp electric motor and equipped with three stage particulate material separation (SN HV-7283).

OPERATIONAL CONDITIONS:

1. Industrial vacuum operation shall not exceed 2080 hours per year without prior District Approval. (Rule 210.1)
2. Visible emissions from sweeping activity shall not exceed 20% opacity for more than 3 minutes in any 1 hour. (Rule 401)
3. Visible emissions from dust collection system exhaust shall have no visible emissions. (Rule 210.1)
4. Fabric dust collector volumetric exhaust flow rate shall not exceed 540 standard cubic feet per minute (scfm). (Rule 210.1)
5. All piping, ducting, hatches, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
6. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
7. Equipment shall be maintained according to the manufacturer's specifications. (Rules 210.1 and 209)
8. 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 a readily available format. (Rule 210.1)
9. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or the public. (Rule 419 and CH&SC, Sec 41700)

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. (Rules 108.1 and 209)

Emission Unit 320 Permit Conditions

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.014	grains/scf
	0.06	lb/hr
	1.56	lb/day
	0.07	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of five years. (Rule 210.1)

Emission Unit 321 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	321	Generator Set with Diesel Fueled Piston Engine

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Generator Set with 171-bhp Diesel Fueled Piston Engine, including the following equipment:

Generator Set driven by 171-bhp EPA Certified Tier 4 (2021), diesel fueled piston engine with turbocharger, and after cooler.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with turbocharger and charge air cooler. (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. Total hours of operation shall not exceed 8,760 hours per year without prior District approval. (Rule 210.1)
5. Engine visible emissions shall be less than 5% opacity or Ringelmann No. $\frac{1}{4}$ during normal operation, except for not 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/ft³ of gas at standard conditions. (Rule 404.1)
7. 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)
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) Engine). (CCR Title 17, Sections 93115 – 93115.15)
9. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rules 209 and 210.1)
10. Permittee shall comply with Rule 427, Section V (Requirements for Engine Greater than 50-bhp) and Section VIII (Administrative Requirements) for subject diesel fueled piston engine. (Rule 427)
11. Permittee shall maintain an engine service log demonstrating compliance with Section V of Rule 427 for at least two years and make such log readily available to District personnel upon request. (Rule 427)
12. In the event that the NO_x minimization maintenance schedule conflicts with the requirement of the manufacturer, defer to the manufacturer's requirements. (Rule 210.1)
13. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rule 210.1)
14. 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)

Emission Unit 321 Permit Conditions

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 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. (Rules 108.1 and 209)

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.01	gm/bhp-hr (Emissions Certificate)
	0.01	lb/hr
	0.13	lb/day
	0.02	ton/yr

<u>Sulfur Oxides (SO_x as SO₂):</u>	1E-3	lb/hr
	0.04	lb/day
	0.01	ton/yr

<u>Oxides of Nitrogen (NO_x as NO₂):</u>	0.09	gm/bhp-hr (Emissions Certificate)
	0.03	lb/hr
	0.81	lb/day
	0.15	ton/yr

<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.01	gm/bhp-hr (Emissions Certificate)
	3E-3	lb/hr
	0.07	lb/day
	0.01	ton/yr

<u>Carbon Monoxide:</u>	0.08	gm/bhp-hr (Emissions Certificate)
	0.03	lb/hr
	0.67	lb/day
	0.12	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of three years. (Rule 210.1)

Emission Unit 322 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1004	322	TREU Replacing Function of Co-Generation Facility

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Temporary Replacement Emission Unit (TREU) Replacing Function of Co-Generation Facility, including the following equipment:

Trailer-mounted water tube boiler equipped 99.9 MMBtu/hr Natural Gas burner.

OPERATIONAL CONDITIONS:

1. Boiler operation shall not exceed 4380-hours/year (180-days) without prior District approval. (Rule 210.1)
2. Boiler's exhaust stack shall have no visible emissions. (Rule 210.1 BACT Requirement)
3. Volume of natural gas burned shall not exceed 2.4 million standard cubic feet per day (MMscf/day). (Rule 210.1)
4. Boiler shall be fired exclusively with California Public Utility Commission (CPUC) quality natural gas. (Rule 210.1 BACT Requirement)
5. Boiler's exhaust concentration of sulfur oxides (calculated as SO₂) shall not exceed 2000 parts per million on a volume basis (ppmv). (Rule 407)
6. Operator shall comply with applicable monitoring, testing, and record keeping requirements of Rule 425.2. (Rule 425.2)
7. Owner/Operator shall maintain records of annual fuel use. (Rule 425.2)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. 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 maintained on site in readily available format. (Rules 210.1 and 425.2)
10. 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)
11. Subject boiler and Cogeneration unit (PTO No. 1004077) shall not operate simultaneously except for no more than 40 days during temporary boiler installation testing and tuning. (Rule 210.1)

SPECIAL CONDITIONS:

- a. TREU boiler shall be removed from operation at or before 180-days of operation or unit shall be subject to Offset and BACT requirements of District Rule 210.1. (Rule 210.1)

Emission Unit 322 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. (Rules 108.1 and 209)

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.72	lb/hr
	17.35	lb/day
	1.56	ton/yr
<u>Sulfur Oxides (SO_x as SO₂):</u>	0.01	gr/scf (Rule 210.1 BACT Requirement)
	0.27	lb/hr
	6.52	lb/day
	0.59	ton/yr
<u>Oxides of Nitrogen (NO_x as NO₂):</u>	30	ppmvd @ 3% O ₂ (Rule 210.1 BACT)
	3.69	lb/hr
	88.64	lb/day
	7.98	ton/yr
<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.52	lb/hr
	12.56	lb/day
	1.13	ton/yr
<u>Carbon Monoxide:</u>	50	ppmvd @ 3% O ₂ (Rule 425.2)
	3.75	lb/hr
	89.96	lb/day
	8.10	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of five years. (Rule 210.1)

Emission Unit 323 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1004	323	TREU Replacing Function of Co-Generation Facility

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Temporary Replacement Emission Unit (TREU) Replacing Function of Co-Generation Facility, including the following equipment:

Trailer-mounted water tube boiler equipped 99.9 MMBtu/hr Natural Gas burner.

OPERATIONAL CONDITIONS:

1. Boiler operation shall not exceed 4380-hours/year (180-days) without prior District approval. (Rule 210.1)
2. Boiler's exhaust stack shall have no visible emissions. (Rule 210.1 BACT Requirement)
3. Volume of natural gas burned shall not exceed 2.4 million standard cubic feet per day (MMscf/day). (Rule 210.1)
4. Boiler shall be fired exclusively with California Public Utility Commission (CPUC) quality natural gas. (Rule 210.1 BACT Requirement)
5. Boiler's exhaust concentration of sulfur oxides (calculated as SO₂) shall not exceed 2000 parts per million on a volume basis (ppmv). (Rule 407)
6. Operator shall comply with applicable monitoring, testing, and record keeping requirements of Rule 425.2. (Rule 425.2)
7. Owner/Operator shall maintain records of annual fuel use. (Rule 425.2)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. 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 maintained on site in readily available format. (Rules 210.1 and 425.2)
10. 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)
11. Subject boiler and Cogeneration unit (PTO No. 1004077) shall not operate simultaneously except for no more than 40 days during temporary boiler installation testing and tuning. (Rule 210.1)

SPECIAL CONDITIONS:

- a. TREU boiler shall be removed from operation at or before 180-days of operation or unit shall be subject to Offset and BACT requirements of District Rule 210.1. (Rule 210.1)

Emission Unit 323 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. (Rules 108.1 and 209)

EMISSION LIMITS:

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

<u>Particulate Matter (PM₁₀):</u>	0.72	lb/hr
	17.35	lb/day
	1.56	ton/yr
<u>Sulfur Oxides (SO_x as SO₂):</u>	0.01	gr/scf (Rule 210.1 BACT Requirement)
	0.27	lb/hr
	6.52	lb/day
	0.59	ton/yr
<u>Oxides of Nitrogen (NO_x as NO₂):</u>	30	ppmvd @ 3% O ₂ (Rule 210.1 BACT)
	3.69	lb/hr
	88.64	lb/day
	7.98	ton/yr
<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.52	lb/hr
	12.56	lb/day
	1.13	ton/yr
<u>Carbon Monoxide:</u>	50	ppmvd @ 3% O ₂ (Rule 425.2)
	3.75	lb/hr
	89.96	lb/day
	8.10	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of five years. (Rule 210.1)

Emission Unit 324 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	324	Street Sweeper

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Street Sweeper, including the following equipment:

Street sweeper powered with onboard 74-bhp diesel piston engine (permit exempt mobile engine)

OPERATIONAL CONDITIONS:

1. Street sweeper shall be equipped with a water spray system having at least eight (8) spray nozzles (4 located between the main broom and conveyor, 2 located at each gutter broom) and a pump pressure of 80 psi. (Rule 210.1 BACT Requirement)
2. Elapsed time meter shall be installed and maintained indicating cumulative hours of operating time. (Rule 210.1)
3. Operation of equipment listed on this permit shall not exceed 2,080 hours per year. (Rule 210.1)
4. Water sprays and dust collection system shall be used when sweeper brooms are in use. (Rule 210.1)
5. Visible emissions from sweeper brooms and pick-up head shall not exceed 20% opacity (excluding water vapor) for more than 3 minutes in any one hour. (Rule 401)
6. There shall be no visible emissions from the collector hopper. (Rule 210.1)
7. All piping, ducting, hatches, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
8. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
9. Material collected in collection hopper shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
10. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rule 210.1)
11. Equipment shall be inspected and maintained according to the manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1)
12. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Records shall include, at minimum: days and hours of operation, maintenance performed on water sprays, and maintenance performed on the vacuum system. Such records shall be kept on site in a readily available format. (Rule 210.1)
13. No emission from use of this equipment shall not 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)

Emission Unit 324 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)

EMISSION LIMITS:

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

Dust Collector Emissions

<u>Particulate Matter (PM₁₀):</u>	0.20	lb/hr
	4.77	lb/day
	0.21	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of five years. (Rules 209 and 210.1)

Emission Unit 325 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	325	Emergency Water Pump Driven by Diesel Fuled Piston Engine

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Water Pump Driven by Diesel Fuled Piston Engine, including the following equipment:

Emergency use water pump driven by 275-bhp EPA Certified Tier 4 diesel fueled piston engine, Equipment No. 9410.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with turbocharger, charge air cooler, electronic control module, exhaust gas recirculation, periodic trap oxidizer, oxidation catalyst, selective catalytic reduction-urea, and ammonia oxidation catalyst. (Rule 210.1 BACT Requirement)
2. Periodic trap oxidizer shall be equipped with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. (Rule 423 Subpart ZZZZ, 40 CFR §60.4209(b))
3. Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (Rule 210.1)
4. Engine shall be equipped with a permanently affixed placard readily available for inspection with the following engine information: brake horsepower, make, model, and serial number. (Rule 210.1)
5. Engine operation shall not exceed 200 hours per year. (Rules 210.1, 427)
6. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (ultra-low sulfur content, 0.0015% by weight). (Rule 210.1 BACT Requirement)
7. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
8. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
9. Engine shall comply with applicable requirements specified in the ATCM for stationary diesel-fueled engines. (Title 17, CCR §93115 - 93115.15)
10. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rule 210.1)
11. Engine shall be maintained according to manufacturer's specifications and emission-related written instructions to ensure compliance with emission limitations. (Rules 210.1, 423 Subpart ZZZZ, 40 CFR §60.4211(a) and (c))
12. Operating records of this equipment shall be maintained in format approved in writing by District kept for a minimum of five 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). (Rules 209, 210.1)

Emission Unit 325 Permit Conditions

13. 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)
14. 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 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. (Rules 108.1 and 209)

EMISSION LIMITS:

Emissions rate of each air contaminant from this operation shall not exceed the following limits:

<u>Particulate Matter (PM₁₀):</u>	0.01	g/bhp-hr (BACT Requirement)
	0.01	lb/hr
	0.22	lb/day
	0.001	ton/yr
<u>Sulfur Oxides (SO_x as SO₂):</u>	0.003	lb/hr
	0.07	lb/day
	0.0003	ton/yr
<u>Oxides of Nitrogen (NO_x as NO₂):</u>	0.30	g/bhp-hr (BACT Requirement)
	0.18	lb/hr
	4.34	lb/day
	0.02	ton/yr
<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.14	g/bhp-hr (BACT Requirement)
	0.09	lb/hr
	2.06	lb/day
	0.01	ton/yr
<u>Carbon Monoxide:</u>	2.6	g/bhp-hr (ATCM Requirement)
	1.58	lb/hr
	37.98	lb/day
	0.16	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of three years. (Rule 210.1)

Emission Unit 326 Permit Conditions

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	<u>Description of Source</u>
1004	326	Emergency Water Pump Driven by Diesel Fuled Piston Engine

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Water Pump Driven by Diesel Fuled Piston Engine, including the following equipment:

Emergency use water pump driven by 275-bhp EPA Certified Tier 4 diesel fueled piston engine, Equipment No. 9411.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with turbocharger, charge air cooler, electronic control module, exhaust gas recirculation, periodic trap oxidizer, oxidation catalyst, selective catalytic reduction-urea, and ammonia oxidation catalyst. (Rule 210.1 BACT Requirement)
2. Periodic trap oxidizer shall be equipped with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. (Rule 423 Subpart ZZZZ, 40 CFR §60.4209(b))
3. Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (Rule 210.1)
4. Engine shall be equipped with a permanently affixed placard readily available for inspection with the following engine information: brake horsepower, make, model, and serial number. (Rule 210.1)
5. Engine operation shall not exceed 200 hours per year. (Rules 210.1, 427)
6. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (ultra-low sulfur content, 0.0015% by weight). (Rule 210.1 BACT Requirement)
7. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
8. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
9. Engine shall comply with applicable requirements specified in the ATCM for stationary diesel-fueled engines. (Title 17, CCR §93115 - 93115.15)
10. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rule 210.1)
11. Engine shall be maintained according to manufacturer's specifications and emission-related written instructions to ensure compliance with emission limitations. (Rules 210.1, 423 Subpart ZZZZ, 40 CFR §60.4211(a) and (c))
12. Operating records of this equipment shall be maintained in format approved in writing by District kept for a minimum of five 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). (Rules 209, 210.1)

Emission Unit 326 Permit Conditions

13. 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)
14. 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 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. (Rules 108.1 and 209)

EMISSION LIMITS:

Emissions rate of each air contaminant from this operation shall not exceed the following limits:

<u>Particulate Matter (PM₁₀):</u>	0.01	g/bhp-hr (BACT Requirement)
	0.01	lb/hr
	0.22	lb/day
	0.001	ton/yr
<u>Sulfur Oxides (SO_x as SO₂):</u>	0.003	lb/hr
	0.07	lb/day
	0.0003	ton/yr
<u>Oxides of Nitrogen (NO_x as NO₂):</u>	0.30	g/bhp-hr (BACT Requirement)
	0.18	lb/hr
	4.34	lb/day
	0.02	ton/yr
<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.14	g/bhp-hr (BACT Requirement)
	0.09	lb/hr
	2.06	lb/day
	0.01	ton/yr
<u>Carbon Monoxide:</u>	2.6	g/bhp-hr (ATCM Requirement)
	1.58	lb/hr
	37.98	lb/day
	0.16	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of three years. (Rule 210.1)

Emission Unit 327 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1004	327	Emergency Water Pump Driven by Diesel Fuled Piston Engine

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Water Pump Driven by Diesel Fuled Piston Engine, including the following equipment:

Emergency use water pump driven by 275-bhp EPA Certified Tier 4 diesel fueled piston engine, Equipment No. 9412.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with turbocharger, charge air cooler, electronic control module, exhaust gas recirculation, periodic trap oxidizer, oxidation catalyst, selective catalytic reduction-urea, and ammonia oxidation catalyst. (Rule 210.1 BACT Requirement)
2. Periodic trap oxidizer shall be equipped with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. (Rule 423 Subpart ZZZZ, 40 CFR §60.4209(b))
3. Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (Rule 210.1)
4. Engine shall be equipped with a permanently affixed placard readily available for inspection with the following engine information: brake horsepower, make, model, and serial number. (Rule 210.1)
5. Engine operation shall not exceed 200 hours per year. (Rules 210.1, 427)
6. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (ultra-low sulfur content, 0.0015% by weight). (Rule 210.1 BACT Requirement)
7. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
8. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
9. Engine shall comply with applicable requirements specified in the ATCM for stationary diesel-fueled engines. (Title 17, CCR §93115 - 93115.15)
10. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rule 210.1)
11. Engine shall be maintained according to manufacturer's specifications and emission-related written instructions to ensure compliance with emission limitations. (Rules 210.1, 423 Subpart ZZZZ, 40 CFR §60.4211(a) and (c))
12. Operating records of this equipment shall be maintained in format approved in writing by District kept for a minimum of five 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). (Rules 209, 210.1)

Emission Unit 327 Permit Conditions

13. 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)
14. 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 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. (Rules 108.1 and 209)

EMISSION LIMITS:

Emissions rate of each air contaminant from this operation shall not exceed the following limits:

<u>Particulate Matter (PM₁₀):</u>	0.01	g/bhp-hr (BACT Requirement)
	0.01	lb/hr
	0.22	lb/day
	0.001	ton/yr
<u>Sulfur Oxides (SO_x as SO₂):</u>	0.003	lb/hr
	0.07	lb/day
	0.0003	ton/yr
<u>Oxides of Nitrogen (NO_x as NO₂):</u>	0.30	g/bhp-hr (BACT Requirement)
	0.18	lb/hr
	4.34	lb/day
	0.02	ton/yr
<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.14	g/bhp-hr (BACT Requirement)
	0.09	lb/hr
	2.06	lb/day
	0.01	ton/yr
<u>Carbon Monoxide:</u>	2.6	g/bhp-hr (ATCM Requirement)
	1.58	lb/hr
	37.98	lb/day
	0.16	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a period of three years. (Rule 210.1)

Emission Unit 328 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1004	328	Prime Water Pump Driven by Diesel Fuled Piston Engine

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Prime Water Pump Driven by Diesel Fuled Piston Engine, including the following equipment:

Emergency use water pump driven by 173-bhp EPA Certified Tier 4 diesel fueled piston engine with turbocharger, after cooler, and Selective Catalytic Reduction (SCR), Equipment No. 9413.

OPERATIONAL CONDITIONS:

1. Total hours of operation shall not exceed 8,760 hours per year without prior District approval. (Rule 210.1)
2. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
3. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
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. Engine shall comply with the requirements of California Code of Regulations (CCR), Title 17, Section 93115 (Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition (CI) Engine). (CCR Title 17, Sections 93115 – 93115.15)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rules 209 and 210.1)
7. Permittee shall comply with Rule 427, Section V (Requirements for Engine Greater than 50-bhp) and Section VIII (Administrative Requirements) for subject diesel fueled piston engine. (Rule 427)
8. Permittee shall maintain an engine service log demonstrating compliance with Section V of Rule 427 for at least two years and make such log readily available to District personnel upon request. (Rule 427)
9. In the event that the NO_x minimization maintenance schedule conflicts with a requirement of the manufacturer, defer to the manufacturer's requirements. (Rule 210.1)
10. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rule 210.1)
11. 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)
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)

Emission Unit 328 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. (Rules 108.1 and 209)

EMISSION LIMITS:

Emissions rate of each air contaminant from this operation shall not exceed the following limits:

<u>Particulate Matter (PM₁₀):</u>	0.01	g/bhp-hr (BACT Requirement)
	4E-3	lb/hr
	0.09	lb/day
	0.02	ton/yr
<u>Sulfur Oxides (SO_x as SO₂):</u>	2E-3	lb/hr
	0.05	lb/day
	0.01	ton/yr
<u>Oxides of Nitrogen (NO_x as NO₂):</u>	0.30	g/bhp-hr (BACT Requirement)
	0.11	lb/hr
	2.75	lb/day
	0.50	ton/yr
<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.14	g/bhp-hr (BACT Requirement)
	0.05	lb/hr
	1.28	lb/day
	0.23	ton/yr
<u>Carbon Monoxide:</u>	3.70	g/bhp-hr (ATCM Requirement)
	1.41	lb/hr
	33.87	lb/day
	6.18	ton/yr

(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 documenting maximum daily emission rate) each day source is operated, and such documentation of compliance shall be retained and made readily available to District for a 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.
§60.1(b)	Any new or revised standard of performance promulgated pursuant to section 111(b) of the Act shall 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 such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
§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.
§60.1(a)(2)	Except for compliance with 40 CFR 60.49b(u), the site shall have the option of either complying directly with the requirements of this part, or reducing the site-wide emissions caps in accordance with the procedures set forth in a permit issued pursuant to 40 CFR 52.2454. If the site chooses the option of reducing the site-wide emissions caps in accordance with the procedures set forth in such permit, the requirements of such permit shall apply in lieu of the otherwise applicable 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.

Remainder of Page Intentionally Left Blank

FEDERAL REGULATIONS
40 CFR 60 SUBPART Dc
Small Industrial-Commercial-Institutional Steam Generating Units

Applicable provisions of 40 CFR 60 Subpart Dc shall apply.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

Applicability and Delegation of Authority

§60.40c	(a) Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h). (b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State. (c) Steam generating units that meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO₂) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in §60.41c. (d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under §60.14. (e) Affected facilities (<i>i.e.</i> heat recovery steam generators and fuel heaters) that are associated with stationary combustion turbines and meet the applicability requirements of subpart KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators, fuel heaters, and other affected facilities that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/h) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/h) heat input of fossil fuel. If the heat recovery steam generator, fuel heater, or other affected facility is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The stationary combustion turbine emissions are subject to subpart GG or KKKK, as applicable, of this part.) (f) Any affected facility that meets the applicability requirements of and is subject to subpart AAAA or subpart CCCC of this part is not subject to this subpart. (g) Any facility that meets the applicability requirements and is subject to an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not subject to this subpart. (h) Affected facilities that also meet the applicability requirements under subpart J or subpart Ja of this part are subject to the PM and NO_x standards under this subpart and the SO₂ standards under subpart J or subpart Ja of this part, as applicable. (i) Temporary boilers are not subject to this subpart.
----------------	--

Standard for Sulfur Dioxide (SO₂)

§60.42c	(a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that combusts only coal shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO₂ emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO₂ emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ in excess of the emission limit is determined pursuant to paragraph (e)(2) of this section. (b) Except as provided in paragraphs (c) and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that: (1) Combusts only coal refuse alone in a fluidized bed combustion steam generating unit shall neither: (i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO₂ emission rate (80 percent reduction); nor (ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of SO₂ in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is fired with coal refuse, the affected facility subject to paragraph (a) of this section. If oil or any other fuel (except coal) is fired with coal refuse, the affected facility is subject to the 87 ng/J (0.20 lb/MMBtu) heat input SO₂ emissions limit or the 90 percent SO₂ reduction requirement specified in paragraph (a) of this section and the emission limit is determined pursuant to paragraph (e)(2) of this section. (2) Combusts only coal and that uses an emerging technology for the control of SO₂ emissions shall neither: (i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 50 percent (0.50) of the potential SO₂ emission rate (50 percent reduction); nor (ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 260 ng/J (0.60 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50 percent SO₂ reduction requirement specified in this paragraph and the emission limit determined pursuant to paragraph (e)(2) of this section. (c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, alone or in combination with any other fuel, and is listed in paragraphs (c)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of the emission limit determined pursuant to paragraph (e)(2) of this section. Percent reduction requirements are not applicable to affected facilities under paragraphs (c)(1), (2), (3), or (4). (1) Affected facilities that have a heat input capacity of 22 MW (75 MMBtu/h) or less;
-----------------------	---

(2) Affected facilities that have an annual capacity for coal of 55 percent (0.55) or less and are subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for coal of 55 percent (0.55) or less.

(3) Affected facilities located in a noncontinental area; or

(4) Affected facilities that combust coal in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from exhaust gases entering the duct burner.

(d) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 215 ng/J (0.50 lb/MMBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

(e) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of the following:

(1) The percent of potential SO₂ emission rate or numerical SO₂ emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for any affected facility that

(i) Combusts coal in combination with any other fuel;

(ii) Has a heat input capacity greater than 22 MW (75 MMBtu/h); and

(iii) Has an annual capacity factor for coal greater than 55 percent (0.55); and

(2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

$$E_s = \frac{(K_a H_a + K_b H_b + K_c H_c)}{(H_a + H_b + H_c)}$$

Where:

E_s = SO₂ emission limit, expressed in ng/J or lb/MMBtu heat input;

K_a = 520 ng/J (1.2 lb/MMBtu);

K_b = 260 ng/J (0.60 lb/MMBtu);

K_c = 215 ng/J (0.50 lb/MMBtu);

H_a = Heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [MMBtu];

H_b = Heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (MMBtu); and

H_c = Heat input from the combustion of oil, in J (MMBtu).

(f) Reduction in the potential SO₂ emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:

	(1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO₂ emission rate; and (2) Emissions from the pretreated fuel (without either combustion or post-combustion SO₂ control) are equal to or less than the emission limits specified under paragraph (b)(2) of this section. (g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis. (h) For affected facilities listed under paragraphs (h)(1), (2), (3), or (4) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under §60.48c(f), as applicable. (1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr). (2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr). (3) Coal-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/h). (4) Other fuels-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/h). (i) The SO₂ emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction. (j) For affected facilities located in noncontinental areas and affected facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.
--	--

Standard for Particulate Matter (PM)

§60.43c	(a) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or combusts mixtures of coal with other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits: (1) 22 ng/J (0.051 lb/MMBtu) heat input if the affected facility combusts only coal, or combusts coal with other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.
----------------	---

(2) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility combusts coal with other fuels, has an annual capacity factor for the other fuels greater than 10 percent (0.10), and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

(b) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts wood or combusts mixtures of wood with other fuels (except coal) and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emissions limits:

(1) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood greater than 30 percent (0.30); or

(2) 130 ng/J (0.30 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood of 30 percent (0.30) or less and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for wood of 30 percent (0.30) or less.

(c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Owners and operators of an affected facility that elect to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart and are subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less are exempt from the opacity standard specified in this paragraph (c).

(d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.

(e)(1) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input, except as provided in paragraphs (e)(2), (e)(3), and (e)(4) of this section.

(2) As an alternative to meeting the requirements of paragraph (e)(1) of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:

(i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels; and

(ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.

	(3) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input. (4) An owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under §60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO₂ emissions is not subject to the PM limit in this section.
--	---

Compliance and Performance Test Methods and Procedures for Sulfur Dioxide

§60.44c	(a) Except as provided in paragraphs (g) and (h) of this section and §60.8(b), performance tests required under §60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in §60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator. (b) The initial performance test required under §60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO₂ emission limits under §60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affect facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions. (c) After the initial performance test required under paragraph (b) of this section and §60.8, compliance with the percent reduction requirements and SO₂ emission limits under §60.42c is based on the average percent reduction and the average SO₂ emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO₂ emission rate are calculated to show compliance with the standard. (d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 of appendix A of this part are used to determine the hourly SO₂ emission rate (E_{ho}) and the 30-day average SO₂ emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the CEMS. Method 19 of appendix A of this part shall be used to calculate E_{ao} when using daily fuel sampling or Method 6B of appendix A of this part. (e) If coal, oil, or coal and oil are combusted with other fuels: (1) An adjusted E_{ho} (E_{hoO}) is used in Equation 19-19 of Method 19 of appendix A of this part to compute the adjusted E_{ao} (E_{aoO}). The E_{hoO} is computed using the following formula: $E_{hoO} = \frac{E_{ho} - E_w(1 - X_1)}{X_1}$
----------------	--

Where:

E_{ho0} = Adjusted E_{ho} , ng/J (lb/MMBtu);

E_{ho} = Hourly SO_2 emission rate, ng/J (lb/MMBtu);

E_w = SO_2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9 of appendix A of this part, ng/J (lb/MMBtu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume $E_w = 0$.

X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(2) The owner or operator of an affected facility that qualifies under the provisions of §60.42c(c) or (d) (where percent reduction is not required) does not have to measure the parameters E_w or X_k if the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19 of appendix A of this part.

(f) Affected facilities subject to the percent reduction requirements under §60.42c(a) or (b) shall determine compliance with the SO_2 emission limits under §60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(1) If only coal is combusted, the percent of potential SO_2 emission rate is computed using the following formula:

$$\%P_s = 100 \left(1 - \frac{\%R_g}{100} \right) \left(1 - \frac{\%R_f}{100} \right)$$

Where:

$\%P_s$ = Potential SO_2 emission rate, in percent;

$\%R_g$ = SO_2 removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

$\%R_f$ = SO_2 removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

(2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(1) of this section are used, except as provided for in the following:

(i) To compute the $\%P_s$, an adjusted $\%R_g$ ($\%R_{go}$) is computed from E_{ao0} from paragraph (c)(1) of this section and an adjusted average SO_2 inlet rate (E_{ai0}) using the following formula:

$$\%R_{go} = 100 \left(1 - \frac{E_{ao}}{E_{ai}} \right)$$

Where:

$\%R_{go}$ = Adjusted $\%R_g$, in percent;

E_{ao0} = Adjusted E_{ao} , ng/J (lb/MMBtu); and

E_{ai0} = Adjusted average SO_2 inlet rate, ng/J (lb/MMBtu).

(ii) To compute E_{ai0} , an adjusted hourly SO_2 inlet rate (E_{hi0}) is used. The E_{hi0} is computed using the following formula:

$$E_{hi0} = \frac{E_{hi} - E_w(1 - X_1)}{X_1}$$

	Where: E_{hi0} = Adjusted E_{hi}, ng/J (lb/MMBtu); E_{hi} = Hourly SO_2 inlet rate, ng/J (lb/MMBtu); E_w = SO_2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume $E_w = 0$; and X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part. (g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under §60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under §60.46c(d)(2). (h) For affected facilities subject to §60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described in §60.48c(f), as applicable. (i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO_2 standards under §60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used. (j) The owner or operator of an affected facility shall use all valid SO_2 emissions data in calculating $\%P_s$ and E_{hi0} under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under §60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating $\%P_s$ or E_{hi0} pursuant to paragraphs (d), (e), or (f) of this section, as applicable.
--	---

Compliance and performance test methods and procedures for particulate matter

§60.45c	(a) The owner or operator of an affected facility subject to the PM and/or opacity standards under §60.43c shall conduct an initial performance test as required under §60.8, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods, except as specified in paragraph (c) of this section. (1) Method 1 of appendix A of this part shall be used to select the sampling site and the number of traverse sampling points. (2) Method 3A or 3B of appendix A-2 of this part shall be used for gas analysis when applying Method 5 or 5B of appendix A-3 of this part or 17 of appendix A-6 of this part.
----------------	---

(3) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:

(i) Method 5 of appendix A of this part may be used only at affected facilities without wet scrubber systems.

(ii) Method 17 of appendix A of this part may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of Sections 8.1 and 11.1 of Method 5B of appendix A of this part may be used in Method 17 of appendix A of this part only if Method 17 of appendix A of this part is used in conjunction with a wet scrubber system. Method 17 of appendix A of this part shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part may be used in conjunction with a wet scrubber system.

(4) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(5) For Method 5 or 5B of appendix A of this part, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 160 ±14 °C (320±25 °F).

(6) For determination of PM emissions, an oxygen (O₂) or carbon dioxide (CO₂) measurement shall be obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.

(7) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rates expressed in ng/J (lb/MMBtu) heat input shall be determined using:

(i) The O₂ or CO₂ measurements and PM measurements obtained under this section, (ii) The dry basis F factor, and

(iii) The dry basis emission rate calculation procedure contained in Method 19 of appendix A of this part.

(8) Method 9 of appendix A-4 of this part shall be used for determining the opacity of stack emissions.

(b) The owner or operator of an affected facility seeking to demonstrate compliance with the PM standards under §60.43c(b)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(c) In place of PM testing with Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part shall install, calibrate, maintain, and operate a CEMS and shall comply with the requirements specified in paragraphs (c)(1) through (c)(14) of this section.

	(1) Notify the Administrator 1 month before starting use of the system. (2) Notify the Administrator 1 month before stopping use of the system. (3) The monitor shall be installed, evaluated, and operated in accordance with §60.13 of subpart A of this part. (4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under §60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later. (5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under §60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (d) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1. (6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data. (7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraph (c)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average. (i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average. (ii) [Reserved] (8) The 1-hour arithmetic averages required under paragraph (c)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of subpart A of this part. (9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (c)(7) of this section are not met. (10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part. (11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O₂ (or CO₂) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and performance tests conducted using the following test methods. (i) For PM, Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part shall be used; and (ii) For O₂ (or CO₂), Method 3A or 3B of appendix A-2 of this part, as applicable shall be used. (12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.
--	---

	(13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average. (14) As of January 1, 2012, and within 90 days after the date of completing each performance test, as defined in §60.8, conducted to demonstrate compliance with this subpart, you must submit relative accuracy test audit (<i>i.e.</i>, reference method) data and performance test (<i>i.e.</i>, compliance test) data, except opacity data, electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/ert_tool.html/) or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database. (d) The owner or operator of an affected facility seeking to demonstrate compliance under §60.43c(e)(4) shall follow the applicable procedures under §60.48c(f). For residual oil-fired affected facilities, fuel supplier certifications are only allowed for facilities with heat input capacities between 2.9 and 8.7 MW (10 to 30 MMBtu/h).
--	--

Emission Monitoring for Sulfur Dioxide

§60.46c	(a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO₂ emission limits under §60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO₂ concentrations and either O₂ or CO₂ concentrations at the outlet of the SO₂ control device (or the outlet of the steam generating unit if no SO₂ control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under §60.42c shall measure SO₂ concentrations and either O₂ or CO₂ concentrations at both the inlet and outlet of the SO₂ control device. (b) The 1-hour average SO₂ emission rates measured by a CEMS shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under §60.42c. Each 1-hour average SO₂ emission rate must be based on at least 30 minutes of operation, and shall be calculated using the data points required under §60.13(h)(2). Hourly SO₂ emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day. (c) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the CEMS. (1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part. (2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part. (3) For affected facilities subject to the percent reduction requirements under §60.42c, the span value of the SO₂ CEMS at the inlet to the SO₂ control device shall be 125 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted, and the span value of the SO₂ CEMS at the outlet from the SO₂ control device shall be 50 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted.
----------------	--

(4) For affected facilities that are not subject to the percent reduction requirements of §60.42c, the span value of the SO₂ CEMS at the outlet from the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) shall be 125 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂ emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂ emission rate by using Method 6B of appendix A of this part. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B of appendix A of this part shall be conducted pursuant to paragraph (d)(3) of this section.

(1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according the Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO₂ input rate.

(2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

(3) Method 6B of appendix A of this part may be used in lieu of CEMS to measure SO₂ at the inlet or outlet of the SO₂ control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable SO₂ and CO₂ measurement train operated at the candidate location and a second similar train operated according to the procedures in §3.2 and the applicable procedures in section 7 of Performance Specification 2 of appendix B of this part. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

(e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to §60.42c(h) (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, as described under §60.48c(f), as applicable.

(f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator.

Emission Monitoring for Particulate Matter

§60.47c	(a) Except as provided in paragraphs (c), (d), (e), and (f) of this section, the owner or operator of an affected facility combusting coal, oil, or wood that is subject to the opacity standards under §60.43c shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard in §60.43c(c) that is not required to use a COMS due to paragraphs (c), (d), (e), or (f) of this section that elects not to use a COMS shall conduct a performance test using Method 9 of appendix A-4 of this part and the procedures in §60.11 to demonstrate compliance with the applicable limit in §60.43c by April 29, 2011, within 45 days of stopping use of an existing COMS, or within 180 days after initial startup of the facility, whichever is later, and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. The observation period for Method 9 of appendix A-4 of this part performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation. (1) Except as provided in paragraph (a)(2) and (a)(3) of this section, the owner or operator shall conduct subsequent Method 9 of appendix A-4 of this part performance tests using the procedures in paragraph (a) of this section according to the applicable schedule in paragraphs (a)(1)(i) through (a)(1)(iv) of this section, as determined by the most recent Method 9 of appendix A-4 of this part performance test results. (i) If no visible emissions are observed, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; (ii) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; (iii) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; or (iv) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted. (2) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 of this part performance tests, elect to perform subsequent monitoring using Method 22 of appendix A-7 of this part according to the procedures specified in paragraphs (a)(2)(i) and (ii) of this section. (i) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A-7 of this part and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (<i>i.e.</i> , 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (<i>i.e.</i> , 90 seconds per 30 minute period), the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible
-----------------------	---

	emissions is equal to or less than 5 percent during a 30 minute observation (<i>i.e.</i>, 90 seconds) or conduct a new Method 9 of appendix A-4 of this part performance test using the procedures in paragraph (a) of this section within 45 calendar days according to the requirements in §60.45c(a)(8). (ii) If no visible emissions are observed for 10 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed. (3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in paragraph (a)(2) of this section. For reference purposes in preparing the monitoring plan, see OAQPS “Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems.” This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods. (b) All COMS shall be operated in accordance with the applicable procedures under Performance Specification 1 of appendix B of this part. The span value of the opacity COMS shall be between 60 and 80 percent. (c) Owners and operators of an affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 26 ng/J (0.060 lb/MMBtu) heat input or less and that do not use a post-combustion technology to reduce SO₂ or PM emissions and that are subject to an opacity standard in §60.43c(c) are not required to operate a COMS if they follow the applicable procedures in §60.48c(f). (d) Owners or operators complying with the PM emission limit by using a PM CEMS must calibrate, maintain, operate, and record the output of the system for PM emissions discharged to the atmosphere as specified in §60.45c(c). The CEMS specified in paragraph §60.45c(c) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. (e) Owners and operators of an affected facility that is subject to an opacity standard in §60.43c(c) and that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO₂, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur, and is operated such that emissions of CO discharged to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis is not required to operate a COMS. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (e)(1) through (4) of this section; or (1) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (e)(1)(i) through (iv) of this section. (i) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in §60.58b(i)(3) of subpart Eb of this part.
--	--

	(ii) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis). (iii) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. The 1-hour averages are calculated using the data points required in §60.13(h)(2). (iv) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part. (2) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day. (3) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less. (4) You must record the CO measurements and calculations performed according to paragraph (e) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action. (f) An owner or operator of an affected facility that is subject to an opacity standard in §60.43c(c) is not required to operate a COMS provided that the affected facility meets the conditions in either paragraphs (f)(1), (2), or (3) of this section. (1) The affected facility uses a fabric filter (baghouse) as the primary PM control device and, the owner or operator operates a bag leak detection system to monitor the performance of the fabric filter according to the requirements in section §60.48Da of this part. (2) The affected facility uses an ESP as the primary PM control device, and the owner or operator uses an ESP predictive model to monitor the performance of the ESP developed in accordance and operated according to the requirements in section §60.48Da of this part. (3) The affected facility burns only gaseous fuels and/or fuel oils that contain no greater than 0.5 weight percent sulfur, and the owner or operator operates the unit according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard. For testing performed as part of this site-specific monitoring plan, the permitting authority may require as an alternative to the notification and reporting requirements specified in §§60.8 and 60.11 that the owner or operator submit any deviations with the excess emissions report required under §60.48c(c).
--	--

Reporting and Recordkeeping Requirements

§60.48c	(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by §60.7 of this part. This notification shall include: (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility. (2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c, or §60.43c. (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired. (4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator. (b) The owner or operator of each affected facility subject to the SO₂ emission limits of §60.42c, or the PM or opacity limits of §60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of this part. (c) In addition to the applicable requirements in §60.7, the owner or operator of an affected facility subject to the opacity limits in §60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in paragraphs (c)(1) through (3) of this section, as applicable to the visible emissions monitoring method used. (1) For each performance test conducted using Method 9 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(1)(i) through (iii) of this section. (i) Dates and time intervals of all opacity observation periods; (ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and (iii) Copies of all visible emission observer opacity field data sheets; (2) For each performance test conducted using Method 22 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(2)(i) through (iv) of this section. (i) Dates and time intervals of all visible emissions observation periods; (ii) Name and affiliation for each visible emission observer participating in the performance test; (iii) Copies of all visible emission observer opacity field data sheets; and
----------------	--

	(iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements. (3) For each digital opacity compliance system, the owner or operator shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Administrator (d) The owner or operator of each affected facility subject to the SO₂ emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall submit reports to the Administrator. (e) The owner or operator of each affected facility subject to the SO₂ emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable. (1) Calendar dates covered in the reporting period. (2) Each 30-day average SO₂ emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken. (3) Each 30-day average percent of potential SO₂ emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken. (4) Identification of any steam generating unit operating days for which SO₂ or diluent (O₂ or CO₂) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken. (5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit. (6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted. (7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods. (8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS. (9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 of appendix B of this part. (10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part. (11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.
--	--

	(f) Fuel supplier certification shall include the following information: (1) For distillate oil: (i) The name of the oil supplier; (ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c; and (iii) The sulfur content or maximum sulfur content of the oil. (2) For residual oil: (i) The name of the oil supplier; (ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location; (iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and (iv) The method used to determine the sulfur content of the oil. (3) For coal: (i) The name of the coal supplier; (ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected); (iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and (iv) The methods used to determine the properties of the coal. (4) For other fuels: (i) The name of the supplier of the fuel; (ii) The potential sulfur emissions rate or maximum potential sulfur emissions rate of the fuel in ng/J heat input; and (iii) The method used to determine the potential sulfur emissions rate of the fuel. (g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.
--	---

	(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO₂ standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month. (3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in §60.42C to use fuel certification to demonstrate compliance with the SO₂ standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month. (h) The owner or operator of each affected facility subject to a federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under §60.42c or §60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month. (i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. (j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.
--	--

Remainder of Page Intentionally Left Blank

FEDERAL REGULATIONS
40 CFR 60 SUBPART GG
Standards of Performance for Stationary Gas Turbines

Applicable provisions of 40 CFR 60 Subpart GG shall apply.

[44 FR 52798, Sept. 10, 1979, as amended at 52 FR 42434, Nov. 5, 1987; 65 FR 61759, Oct. 17, 2000, July 8, 2004; 91 FR 1976, Jan. 15, 2026]

Applicability

§60.330	(a) The provisions of this subpart are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired. (b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of this part except as provided in paragraphs (c) and (j) of §60.332.
----------------	---

Standard for Nitrogen Oxides

§60.332	(a) On and after the date on which the performance test required by §60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraphs (b), (c), and (d) of this section shall comply with one of the following, except as provided in paragraphs (e), (f), (g), (h), (i), (j), (k), and (l) of this section. (1) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of: $STD = 0.0075 \frac{(14.4)}{Y} + F$ where: STD = allowable ISO corrected (if required as given in §60.335(b)(1)) NO_x emission concentration (percent by volume at 15 percent oxygen and on a dry basis), Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and F = NO_x emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section. (2) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of: $STD = 0.0150 \frac{(14.4)}{Y} + F$
----------------	--

where:

STD = allowable ISO corrected (if required as given in §60.335(b)(1)) NO_x emission concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

F = NO_x emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section.

(3) The use of F in paragraphs (a)(1) and (2) of this section is optional. That is, the owner or operator may choose to apply a NO_x allowance for fuel-bound nitrogen and determine the appropriate F-value in accordance with paragraph (a)(4) of this section or may accept an F-value of zero.

(4) If the owner or operator elects to apply a NO_x emission allowance for fuel-bound nitrogen, F shall be defined according to the nitrogen content of the fuel during the most recent performance test required under §60.8 as follows:

Fuel-bound nitrogen (percent by weight)	F (NO _x percent by volume)
N ≤ 0.015	0
0.015 < N ≤ 0.1	0.04 (N)
0.1 < N ≤ 0.25	0.004 + 0.0067(N - 0.1)
N > 0.25	0.005

Where:

N = the nitrogen content of the fuel (percent by weight).

or:

Manufacturers may develop and submit to EPA custom fuel-bound nitrogen allowances for each gas turbine model they manufacture. These fuel-bound nitrogen allowances shall be substantiated with data and must be approved for use by the Administrator before the initial performance test required by §60.8. Notices of approval of custom fuel-bound nitrogen allowances will be published in the Federal Register.

(b) Electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with the provisions of paragraph (a)(1) of this section.

(c) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired, shall comply with the provisions of paragraph (a)(2) of this section.

(d) Stationary gas turbines with a manufacturer's rated base load at ISO conditions of 30 megawatts or less except as provided in §60.332(b) shall comply with paragraph (a)(2) of this section.

(e) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired and that have commenced construction prior to October 3, 1982 are exempt from paragraph (a) of this section.

	(f) Stationary gas turbines using water or steam injection for control of NO_x emissions are exempt from paragraph (a) when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine. (g) Emergency gas turbines, military gas turbines for use in other than a garrison facility, military gas turbines installed for use as military training facilities, and fire fighting gas turbines are exempt from paragraph (a) of this section. (h) Stationary gas turbines engaged by manufacturers in research and development of equipment for both gas turbine emission control techniques and gas turbine efficiency improvements are exempt from paragraph (a) on a case-by-case basis as determined by the Administrator. (i) Exemptions from the requirements of paragraph (a) of this section will be granted on a case-by-case basis as determined by the Administrator in specific geographical areas where mandatory water restrictions are required by governmental agencies because of drought conditions. These exemptions will be allowed only while the mandatory water restrictions are in effect. (j) Stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour that commenced construction, modification, or reconstruction between the dates of October 3, 1977, and January 27, 1982, and were required in the September 10, 1979, Federal Register (44 FR 52792) to comply with paragraph (a)(1) of this section, except electric utility stationary gas turbines, are exempt from paragraph (a) of this section. (k) Stationary gas turbines with a heat input greater than or equal to 10.7 gigajoules per hour (10 million Btu/hour) when fired with natural gas are exempt from paragraph (a)(2) of this section when being fired with an emergency fuel. (l) Regenerative cycle gas turbines with a heat input less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) are exempt from paragraph (a) of this section.
--	---

Standard for Sulfur Dioxide

§60.333	On and after the date on which the performance test required to be conducted by §60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with one or the other of the following conditions: (a) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis. (b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw).
----------------	---

Monitoring of Operations

§60.334	(a) Except as provided in paragraph (b) of this section, the owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water or steam injection to control NO_x emissions shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine. (b) The owner or operator of any stationary gas turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which uses water or steam injection to control NO_x emissions may, as an alternative to operating the continuous monitoring system described in paragraph (a) of this section, install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO_x and O₂ monitors. As an alternative, a CO₂ monitor may be used to adjust the measured NO_x concentrations to 15 percent O₂ by either converting the CO₂ hourly averages to equivalent O₂ concentrations using Equation F-14a or F-14b in appendix F to part 75 of this chapter and making the adjustments to 15 percent O₂, or by using the CO₂ readings directly to make the adjustments, as described in Method 20. If the option to use a CEMS is chosen, the CEMS shall be installed, certified, maintained and operated as follows: (1) Each CEMS must be installed and certified according to PS 2 and 3 (for diluent) of 40 CFR part 60, appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. Appendix F, Procedure 1 is not required. The relative accuracy test audit (RATA) of the NO_x and diluent monitors may be performed individually or on a combined basis, <i>i.e.</i>, the relative accuracy tests of the CEMS may be performed either: (i) On a ppm basis (for NO_x) and a percent O₂ basis for oxygen; or (ii) On a ppm at 15 percent O₂ basis; or (iii) On a ppm basis (for NO_x) and a percent CO₂ basis (for a CO₂ monitor that uses the procedures in Method 20 to correct the NO_x data to 15 percent O₂). (2) As specified in §60.13(e)(2), during each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour. (3) For purposes of identifying excess emissions, CEMS data must be reduced to hourly averages as specified in §60.13(h). (i) For each unit operating hour in which a valid hourly average, as described in paragraph (b)(2) of this section, is obtained for both NO_x and diluent, the data acquisition and handling system must calculate and record the hourly NO_x emissions in the units of the applicable NO_x emission standard under §60.332(a), <i>i.e.</i>, percent NO_x by volume, dry basis, corrected to 15 percent O₂ and International Organization for Standardization (ISO) standard conditions (if required as given in §60.335(b)(1)). For any hour in which the hourly average O₂ concentration exceeds 19.0 percent O₂, a diluent cap value of 19.0 percent O₂ may be used in the emission calculations. (ii) A worst case ISO correction factor may be calculated and applied using historical ambient data. For the purpose of this calculation, substitute the maximum humidity of ambient air (H_o), minimum ambient temperature (T_a), and minimum combustor inlet absolute pressure (P_o) into the ISO correction equation.
-----------------------	--

(iii) If the owner or operator has installed a NO_x CEMS to meet the requirements of part 75 of this chapter, and is continuing to meet the ongoing requirements of part 75 of this chapter, the CEMS may be used to meet the requirements of this section, except that the missing data substitution methodology provided for at 40 CFR part 75, subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required in §60.7(c).

(c) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which does not use steam or water injection to control NO_x emissions, the owner or operator may, but is not required to, for purposes of determining excess emissions, use a CEMS that meets the requirements of paragraph (b) of this section. Also, if the owner or operator has previously submitted and received EPA, State, or local permitting authority approval of a procedure for monitoring compliance with the applicable NO_x emission limit under §60.332, that approved procedure may continue to be used.

(d) The owner or operator of any new turbine constructed after July 8, 2004, and which uses water or steam injection to control NO_x emissions may elect to use either the requirements in paragraph (a) of this section for continuous water or steam to fuel ratio monitoring or may use a NO_x CEMS installed, certified, operated, maintained, and quality-assured as described in paragraph (b) of this section.

(e) The owner or operator of any new turbine that commences construction after July 8, 2004, and which does not use water or steam injection to control NO_x emissions, may, but is not required to, elect to use a NO_x CEMS installed, certified, operated, maintained, and quality-assured as described in paragraph (b) of this section. Other acceptable monitoring approaches include periodic testing approved by EPA or the State or local permitting authority or continuous parameter monitoring as described in paragraph (f) of this section.

(f) The owner or operator of a new turbine that commences construction after July 8, 2004, which does not use water or steam injection to control NO_x emissions may, but is not required to, perform continuous parameter monitoring as follows:

(1) For a diffusion flame turbine without add-on selective catalytic reduction controls (SCR), the owner or operator shall define at least four parameters indicative of the unit's NO_x formation characteristics and shall monitor these parameters continuously.

(2) For any lean premix stationary combustion turbine, the owner or operator shall continuously monitor the appropriate parameters to determine whether the unit is operating in low-NO_x mode.

(3) For any turbine that uses SCR to reduce NO_x emissions, the owner or operator shall continuously monitor appropriate parameters to verify the proper operation of the emission controls.

(4) For affected units that are also regulated under part 75 of this chapter, if the owner or operator elects to monitor NO_x emission rate using the methodology in appendix E to part 75 of this chapter, or the low mass emissions methodology in §75.19 of this chapter, the requirements of this paragraph (f) may be met by performing the parametric monitoring described in section 2.3 of appendix E or in §75.19(c)(1)(iv)(H) of this chapter.

(g) The steam or water to fuel ratio or other parameters that are continuously monitored as described in paragraphs (a), (d) or (f) of this section shall be monitored during the performance test required under §60.8, to establish acceptable values and ranges. The owner or operator may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. The owner or operator shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NO_x emission controls.

The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information shall be included in the monitoring plan. For affected units that are also subject to part 75 of this chapter and that use the low mass emissions methodology in §75.19 of this chapter or the NO_x emission measurement methodology in appendix E to part 75, the owner or operator may meet the requirements of this paragraph by developing and keeping on-site (or at a central location for unmanned facilities) a quality-assurance plan, as described in §75.19 (e)(5) or in section 2.3 of appendix E and section 1.3.6 of appendix B to part 75 of this chapter.

(h) The owner or operator of any stationary gas turbine subject to the provisions of this subpart:

(1) Shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in paragraph (h)(3) of this section. The sulfur content of the fuel must be determined using total sulfur methods described in §60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86 (all of which are incorporated by reference-see §60.17), which measure the major sulfur compounds may be used; and

(2) Shall monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen (*i.e.*, if an F-value greater than zero is being or will be used by the owner or operator to calculate STD in §60.332). The nitrogen content of the fuel shall be determined using methods described in §60.335(b)(9) or an approved alternative.

(3) Notwithstanding the provisions of paragraph (h)(1) of this section, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in §60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:

(i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or

(ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

(4) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and for which a custom fuel monitoring schedule has previously been approved, the owner or operator may, without submitting a special petition to the Administrator, continue monitoring on this schedule.

(i) The frequency of determining the sulfur and nitrogen content of the fuel shall be as follows:

(1) *Fuel oil.* For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of appendix D to part 75 of this chapter (*i.e.*, flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank). If an emission allowance is being claimed for fuel-bound nitrogen, the nitrogen content of the oil shall be determined and recorded once per unit operating day.

(2) *Gaseous fuel.* Any applicable nitrogen content value of the gaseous fuel shall be determined and recorded once per unit operating day. For owners and operators that elect not to demonstrate sulfur content using options in paragraph (h)(3) of this section, and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded once per unit operating day.

(3) *Custom schedules.* Notwithstanding the requirements of paragraph (i)(2) of this section, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in paragraphs (i)(3)(i) and (i)(3)(ii) of this section, custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in §60.333.

(i) The two custom sulfur monitoring schedules set forth in paragraphs (i)(3)(i)(A) through (D) and in paragraph (i)(3)(ii) of this section are acceptable, without prior Administrative approval:

(A) The owner or operator shall obtain daily total sulfur content measurements for 30 consecutive unit operating days, using the applicable methods specified in this subpart. Based on the results of the 30 daily samples, the required frequency for subsequent monitoring of the fuel's total sulfur content shall be as specified in paragraph (i)(3)(i)(B), (C), or (D) of this section, as applicable.

(B) If none of the 30 daily measurements of the fuel's total sulfur content exceeds 0.4 weight percent (4000 ppmw), subsequent sulfur content monitoring may be performed at 12 month intervals. If any of the samples taken at 12-month intervals has a total sulfur content between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), follow the procedures in paragraph (i)(3)(i)(C) of this section. If any measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section.

(C) If at least one of the 30 daily measurements of the fuel's total sulfur content is between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), but none exceeds 0.8 weight percent (8000 ppmw), then:

(1) Collect and analyze a sample every 30 days for three months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, follow the procedures in paragraph (i)(3)(i)(C)(2) of this section.

(2) Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, follow the procedures in paragraph (i)(3)(i)(C)(3) of this section.

(3) Begin monitoring at 12-month intervals. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, continue to monitor at this frequency.

(D) If a sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), immediately begin daily monitoring according to paragraph (i)(3)(i)(A) of this section. Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur content no greater than 0.8 weight percent (8000 ppmw), are obtained. At that point, the applicable procedures of paragraph (i)(3)(i)(B) or (C) of this section shall be followed.

(ii) The owner or operator may use the data collected from the 720-hour sulfur sampling demonstration described in section 2.3.6 of appendix D to part 75 of this chapter to determine a custom sulfur sampling schedule, as follows:

	(A) If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 scf (<i>i.e.</i>, the maximum total sulfur content of natural gas as defined in §60.331(u)), no additional monitoring of the sulfur content of the gas is required, for the purposes of this subpart. (B) If the maximum fuel sulfur content obtained from any of the 720 hourly samples exceeds 20 grains/100 scf, but none of the sulfur content values (when converted to weight percent sulfur) exceeds 0.4 weight percent (4000 ppmw), then the minimum required sampling frequency shall be one sample at 12 month intervals. (C) If any sample result exceeds 0.4 weight percent sulfur (4000 ppmw), but none exceeds 0.8 weight percent sulfur (8000 ppmw), follow the provisions of paragraph (i)(3)(i)(C) of this section. (D) If the sulfur content of any of the 720 hourly samples exceeds 0.8 weight percent (8000 ppmw), follow the provisions of paragraph (i)(3)(i)(D) of this section. (j) For each affected unit that elects to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content under this subpart, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows: (1) Nitrogen oxides. (i) For turbines using water or steam to fuel ratio monitoring: (A) An excess emission shall be any unit operating hour for which the average steam or water to fuel ratio, as measured by the continuous monitoring system, falls below the acceptable steam or water to fuel ratio needed to demonstrate compliance with §60.332, as established during the performance test required in §60.8. Any unit operating hour in which no water or steam is injected into the turbine shall also be considered an excess emission. (B) A period of monitor downtime shall be any unit operating hour in which water or steam is injected into the turbine, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid. (C) Each report shall include the average steam or water to fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), gas turbine load, and (if applicable) the nitrogen content of the fuel during each excess emission. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in §60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of §60.335(b)(1). (ii) If the owner or operator elects to take an emission allowance for fuel bound nitrogen, then excess emissions and periods of monitor downtime are as described in paragraphs (j)(1)(ii)(A) and (B) of this section. (A) An excess emission shall be the period of time during which the fuel-bound nitrogen (N) is greater than the value measured during the performance test required in §60.8 and used to determine the allowance. The excess emission begins on the date and hour of the sample which shows that N is greater than the performance test value, and ends with the date and hour of a subsequent sample which shows a fuel nitrogen content less than or equal to the performance test value.
--	--

(B) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour that a required sample is taken, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.

(iii) For turbines using NO_x and diluent CEMS:

(A) An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NO_x concentration exceeds the applicable emission limit in §60.332(a)(1) or (2). For the purposes of this subpart, a “4-hour rolling average NO_x concentration” is the arithmetic average of the average NO_x concentration measured by the CEMS for a given hour (corrected to 15 percent O₂ and, if required under §60.335(b)(1), to ISO standard conditions) and the three unit operating hour average NO_x concentrations immediately preceding that unit operating hour.

(B) A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NO_x concentration or diluent (or both).

(C) Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period and (if the owner or operator has claimed an emission allowance for fuel bound nitrogen) the nitrogen content of the fuel during the period of excess emissions. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in §60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of §60.335(b)(1).

(iv) For owners or operators that elect, under paragraph (f) of this section, to monitor combustion parameters or parameters that document proper operation of the NO_x emission controls:

(A) An excess emission shall be a 4-hour rolling unit operating hour average in which any monitored parameter does not achieve the target value or is outside the acceptable range defined in the parameter monitoring plan for the unit.

(B) A period of monitor downtime shall be a unit operating hour in which any of the required parametric data are either not recorded or are invalid.

(2) Sulfur dioxide. If the owner or operator is required to monitor the sulfur content of the fuel under paragraph (h) of this section:

(i) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

(ii) If the option to sample each delivery of fuel oil has been selected, the owner or operator shall immediately switch to one of the other oil sampling options (*i.e.*, daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.8 weight percent. The owner or operator shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and shall evaluate excess emissions according to paragraph (j)(2)(i) of this section. When all of the fuel from the delivery has been burned, the owner or operator may resume using the as-delivered sampling option.

(iii) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.

	(3) <i>Ice fog</i>. Each period during which an exemption provided in §60.332(f) is in effect shall be reported in writing to the Administrator quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. (4) <i>Emergency fuel</i>. Each period during which an exemption provided in §60.332(k) is in effect shall be included in the report required in §60.7(c). For each period, the type, reasons, and duration of the firing of the emergency fuel shall be reported. (5) All reports required under §60.7(c) shall be postmarked by the 30th day following the end of each 6-month period.
--	---

Test methods and Procedures

§60.335	(a) The owner or operator shall conduct the performance tests required in §60.8, using either (1) EPA Method 20, (2) ASTM D6522-00 (incorporated by reference, see §60.17), or (3) EPA Method 7E and either EPA Method 3 or 3A in appendix A to this part, to determine NO_x and diluent concentration. (4) Sampling traverse points are to be selected following Method 20 or Method 1, (non-particulate procedures) and sampled for equal time intervals. The sampling shall be performed with a traversing single-hole probe or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points. (5) Notwithstanding paragraph (a)(4) of this section, the owner or operator may test at few points than are specified in Method 1 or Method 20 if the following conditions are met: (i) You may perform a stratification test for NO_x and diluent pursuant to (A) [Reserved] (B) The procedures specified in section 6.5.6.1(a) through (c) appendix A to part 75 of this chapter. (ii) Once the stratification sampling is completed, the owner or operator may use the following alternative sample point selection criteria for the performance test:
----------------	---

(A) If each of the individual traverse point NO_x concentrations, normalized to 15 percent O₂, is within 10 percent of the mean normalized concentration for all traverse points, then you may use 3 points (located either 16.7, 50.0, and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The 3 points shall be located along the measurement line that exhibited the highest average normalized NO_x concentration during the stratification test; or

(B) If each of the individual traverse point NO_x concentrations, normalized to 15 percent O₂, is within 5 percent of the mean normalized concentration for all traverse points, then you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid.

(6) Other acceptable alternative reference methods and procedures are given in paragraph (c) of this section.

(b) The owner or operator shall determine compliance with the applicable nitrogen oxides emission limitation in §60.332 and shall meet the performance test requirements of §60.8 as follows:

(1) For each run of the performance test, the mean nitrogen oxides emission concentration (NO_{xo}) corrected to 15 percent O₂ shall be corrected to ISO standard conditions using the following equation. Notwithstanding this requirement, use of the ISO correction equation is optional for: Lean premix stationary combustion turbines; units used in association with heat recovery steam generators (HRSG) equipped with duct burners; and units equipped with add-on emission control devices:

$$NO_X = (NO_{Xo})(P_r/P_o)^{0.5} e^{19(H_o - 0.00633)} (288^\circ K/T_a)^{1.53}$$

Where:

NO_x = emission concentration of NO_x at 15 percent O₂ and ISO standard ambient conditions, ppm by volume, dry basis,

NO_{xo} = mean observed NO_x concentration, ppm by volume, dry basis, at 15 percent O₂,

P_r = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure. Alternatively, you may use 760 mm Hg (29.92 in Hg),

P_o = observed combustor inlet absolute pressure at test, mm Hg. Alternatively, you may use the barometric pressure for the date of the test,

H_o = observed humidity of ambient air, g H₂O/g air,

e = transcendental constant, 2.718, and

T_a = ambient temperature, °K.

(2) The 3-run performance test required by §60.8 must be performed within 5 percent at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. If the turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel. Notwithstanding these requirements, performance testing is not required for any emergency fuel (as defined in §60.331).

(3) For a combined cycle turbine system with supplemental heat (duct burner), the owner or operator may elect to measure the turbine NO_x emissions after the duct burner rather than directly after the turbine. If the owner or operator elects to use this alternative sampling location, the applicable NO_x emission limit in §60.332 for the combustion turbine must still be met.

- (4) If water or steam injection is used to control NO_x with no additional post-combustion NO_x control and the owner or operator chooses to monitor the steam or water to fuel ratio in accordance with §60.334(a), then that monitoring system must be operated concurrently with each EPA Method 20, ASTM D6522-00 (incorporated by reference, see §60.17), or EPA Method 7E run and shall be used to determine the fuel consumption and the steam or water to fuel ratio necessary to comply with the applicable §60.332 NO_x emission limit.
- (5) If the owner operator elects to claim an emission allowance for fuel bound nitrogen as described in §60.332, then concurrently with each reference method run, a representative sample of the fuel used shall be collected and analyzed, following the applicable procedures described in §60.335(b)(9). These data shall be used to determine the maximum fuel nitrogen content for which the established water (or steam) to fuel ratio will be valid.
- (6) If the owner or operator elects to install a CEMS, the performance evaluation of the CEMS may either be conducted separately (as described in paragraph (b)(7) of this section) or as part of the initial performance test of the affected unit.
- (7) If the owner or operator elects to install and certify a NO_x CEMS under §60.334(e), then the initial performance test required under §60.8 may be done in the following alternative manner:
- (i) Perform a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load.
 - (ii) Use the test data both to demonstrate compliance with the applicable NO_x emission limit under §60.332 and to provide the required reference method data for the RATA of the CEMS described under §60.334(b).
 - (iii) The requirement to test at three additional load levels is waived.
- (8) If the owner or operator elects under §60.334(f) to monitor combustion parameters or parameters indicative of proper operation of NO_x emission controls, the appropriate parameters shall be continuously monitored and recorded during each run of the initial performance test, to establish acceptable operating ranges, for purposes of the parameter monitoring plan for the affected unit, as specified in §60.334(g).
- (9) To determine the fuel bound nitrogen content of fuel being fired (if an emission allowance is claimed for fuel bound nitrogen), the owner or operator may use equipment and procedures meeting the requirements of:
- (i) For liquid fuels, ASTM D2597-94 (Reapproved 1999), D6366-99, D4629-02, D5762-02 (all of which are incorporated by reference, *see* §60.17); or
 - (ii) For gaseous fuels, shall use analytical methods and procedures that are accurate to within 5 percent of the instrument range and are approved by the Administrator.
- (10) If the owner or operator is required under §60.334(i)(1) or (3) to periodically determine the sulfur content of the fuel combusted in the turbine, a minimum of three fuel samples shall be collected during the performance test. Analyze the samples for the total sulfur content of the fuel using:
- (i) For liquid fuels, ASTM D129-00, D2622-98, D4294-02, D1266-98, D5453-00 or D1552-01 (all of which are incorporated by reference, *see* §60.17); or

	(ii) For gaseous fuels, ASTM D1072-80, 90 (Reapproved 1994); D3246-81, 92, 96; D4468-85 (Reapproved 2000); or D6667-01 (all of which are incorporated by reference, see §60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the prior approval of the Administrator. (11) The fuel analyses required under paragraphs (b)(9) and (b)(10) of this section may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency. (c) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section: (1) Instead of using the equation in paragraph (b)(1) of this section, manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in §60.8 to ISO standard day conditions.
--	--

Remainder of Page Intentionally Left Blank

FEDERAL REGULATIONS
40 CFR 60 SUBPART OOO
Standards of Performance for Nonmetallic Mineral Processing Plants

Applicable provisions of 40 CFR 60 Subpart OOO shall apply.

[74 FR 19309, Apr. 28, 2009, unless otherwise noted.]

Applicability and Designation of Affected Facility

§60.670	(a)(1) Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart. (2) The provisions of this subpart do not apply to the following operations: All facilities located in underground mines; plants without crushers or grinding mills above ground; and wet material processing operations (as defined in §60.671). (b) An affected facility that is subject to the provisions of subparts F or I of this part or that follows in the plant process any facility subject to the provisions of subparts F or I of this part is not subject to the provisions of this subpart. (c) Facilities at the following plants are not subject to the provisions of this subpart: (1) Fixed sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 23 megagrams per hour (25 tons per hour) or less; (2) Portable sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 136 megagrams per hour (150 tons per hour) or less; and (3) Common clay plants and pumice plants with capacities, as defined in §60.671, of 9 megagrams per hour (10 tons per hour) or less. (d)(1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in §60.671, having the same function as the existing facility, and there is no increase in the amount of emissions, the new facility is exempt from the provisions of §§60.672, 60.674, and 60.675 except as provided for in paragraph (d)(3) of this section. (2) An owner or operator complying with paragraph (d)(1) of this section shall submit the information required in §60.676(a). (3) An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in paragraph (d)(1) of this section and must comply with the provisions of §§60.672, 60.674 and 60.675. (e) An affected facility under paragraph (a) of this section that commences construction, modification, or reconstruction after August 31, 1983, is subject to the requirements of this part.
----------------	---

Standard for Particulate Matter (PM)

§60.672	(a) Affected facilities must meet the stack emission limits and compliance requirements in Table 2 of this subpart within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.8. The requirements in Table 2 of this subpart apply for affected facilities with capture systems used to capture and transport particulate matter to a control device. (b) Affected facilities must meet the fugitive emission limits and compliance requirements in Table 3 of this subpart within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11. The requirements in Table 3 of this subpart apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems. (c) [Reserved] (d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section. (e) If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a) and (b) of this section, or the building enclosing the affected facility or facilities must comply with the following emission limits: (1) Fugitive emissions from the building openings (except for vents as defined in §60.671) must not exceed 7 percent opacity; and (2) Vents (as defined in §60.671) in the building must meet the applicable stack emission limits and compliance requirements in Table 2 of this subpart. (f) Any baghouse that controls emissions from only an individual, enclosed storage bin is exempt from the applicable stack PM concentration limit (and associated performance testing) in Table 2 of this subpart but must meet the applicable stack opacity limit and compliance requirements in Table 2 of this subpart. This exemption from the stack PM concentration limit does not apply for multiple storage bins with combined stack emissions.
----------------	--

Reconstruction

§60.673	(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; and elevator buckets. (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) which are or will be replaced pursuant to all continuous programs of component replacement commenced within any 2-year period following August 31, 1983.
----------------	--

Monitoring of Operations

§60.674	(a) The owner or operator of any affected facility subject to the provisions of this subpart which uses a wet scrubber to control emissions shall install, calibrate, maintain and operate the following monitoring devices: (1) A device for the continuous measurement of the pressure loss of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 250 pascals ± 1 inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions. (2) A device for the continuous measurement of the scrubbing liquid flow rate to the wet scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 5 percent of design scrubbing liquid flow rate and must be calibrated on an annual basis in accordance with manufacturer's instructions. (b) The owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses wet suppression to control emissions from the affected facility must perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The owner or operator must initiate corrective action within 24 hours and complete corrective action as expeditiously as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles. The owner or operator must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under §60.676(b). (1) If an affected facility relies on water carryover from upstream water sprays to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement specified in Table 3 of this subpart provided that the affected facility meets the criteria in paragraphs (b)(1)(i) and (ii) of this section: (i) The owner or operator of the affected facility conducts periodic inspections of the upstream water spray(s) that are responsible for controlling fugitive emissions from the affected facility. These inspections are conducted according to paragraph (b) of this section and §60.676(b), and (ii) The owner or operator of the affected facility designates which upstream water spray(s) will be periodically inspected at the time of the initial performance test required under §60.11 of this part and §60.675 of this subpart. (2) If an affected facility that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (for example, water from recent rainfall), the logbook entry required under §60.676(b) must specify the control mechanism being used instead of the water sprays. (c) Except as specified in paragraph (d) or (e) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions must conduct quarterly 30-minute visible emissions inspections using EPA Method 22 (40 CFR part 60, Appendix A-7). The Method 22 (40 CFR part 60, Appendix A-7) test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are observed, the owner or operator of the affected facility must initiate corrective action within 24 hours to return the baghouse to normal operation. The owner or operator must record each Method 22 (40 CFR part 60, Appendix A-7) test, including the date and any corrective actions taken, in the logbook required under §60.676(b). The owner or operator of the affected facility may establish a different baghouse-specific success level for the visible emissions test (other than no visible emissions) by conducting a PM performance test according to §60.675(b) simultaneously with a Method 22 (40 CFR part 60, Appendix A-7) to determine what constitutes normal visible emissions from that affected facility's baghouse when it is in compliance with the applicable PM concentration limit in Table 2 of this subpart. The revised visible emissions success level must be incorporated into the permit for the affected facility.
----------------	--

(d) As an alternative to the periodic Method 22 (40 CFR part 60, Appendix A-7) visible emissions inspections specified in paragraph (c) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions may use a bag leak detection system. The owner or operator must install, operate, and maintain the bag leak detection system according to paragraphs (d)(1) through (3) of this section.

(1) Each bag leak detection system must meet the specifications and requirements in paragraphs (d)(1)(i) through (viii) of this section.

(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (0.00044 grains per actual cubic foot) or less.

(ii) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (*e.g.*, using a strip chart recorder or a data logger).

(iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (d)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(iv) In the initial adjustment of the bag leak detection system, the owner or operator must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(v) Following initial adjustment, the owner or operator shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided in paragraph (d)(1)(vi) of this section.

(vi) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (d)(2) of this section.

(vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.

(viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(2) The owner or operator of the affected facility must develop and submit to the Administrator or delegated authority for approval of a site-specific monitoring plan for each bag leak detection system. The owner or operator must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in paragraphs (d)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system;

(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;

(iii) Operation of the bag leak detection system, including quality assurance procedures;

	(iv) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list; (v) How the bag leak detection system output will be recorded and stored; and (vi) Corrective action procedures as specified in paragraph (d)(3) of this section. In approving the site-specific monitoring plan, the Administrator or delegated authority may allow owners and operators more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable. (3) For each bag leak detection system, the owner or operator must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph (d)(2)(vi) of this section, the owner or operator must alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following: (i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions; (ii) Sealing off defective bags or filter media; (iii) Replacing defective bags or filter media or otherwise repairing the control device; (iv) Sealing off a defective fabric filter compartment; (v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or (vi) Shutting down the process producing the PM emissions. (e) As an alternative to the periodic Method 22 (40 CFR part 60, Appendix A-7) visible emissions inspections specified in paragraph (c) of this section, the owner or operator of any affected facility that is subject to the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA) may follow the continuous compliance requirements in row 1 items (i) through (iii) of Table 6 to Subpart AAAAA of 40 CFR part 63.
--	--

Test Methods and Procedures

§60.675	(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 appendices A-1 through A-7 of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (e) of this section. (b) The owner or operator shall determine compliance with the PM standards in §60.672(a) as follows: (1) Except as specified in paragraphs (e)(3) and (4) of this section, Method 5 of Appendix A-3 of this part or Method 17 of Appendix A-6 of this part shall be used to determine the particulate matter concentration.
----------------	---

	The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5 (40 CFR part 60, Appendix A-3), if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter. (2) Method 9 of Appendix A-4 of this part and the procedures in §60.11 shall be used to determine opacity. (c)(1) In determining compliance with the particulate matter standards in §60.672(b) or §60.672(e)(1), the owner or operator shall use Method 9 of Appendix A-4 of this part and the procedures in §60.11, with the following additions: (i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet). (ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (<i>e.g.</i>, road dust). The required observer position relative to the sun (Method 9 of Appendix A-4 of this part, Section 2.1) must be followed. (iii) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible. (2)(i) In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under §60.672(f) of this subpart, using Method 9 (40 CFR part 60, Appendix A-4), the duration of the Method 9 (40 CFR part 60, Appendix A-4) observations shall be 1 hour (ten 6-minute averages). (ii) The duration of the Method 9 (40 CFR part 60, Appendix A-4) observations may be reduced to the duration the affected facility operates (but not less than 30 minutes) for baghouses that control storage bins or enclosed truck or railcar loading stations that operate for less than 1 hour at a time. (3) When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) or §60.672(e)(1) of this subpart, the duration of the Method 9 (40 CFR part 60, Appendix A-4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Table 3 of this subpart must be based on the average of the five 6-minute averages. (d) To demonstrate compliance with the fugitive emission limits for buildings specified in §60.672(e)(1), the owner or operator must complete the testing specified in paragraph (d)(1) and (2) of this section. Performance tests must be conducted while all affected facilities inside the building are operating. (1) If the building encloses any affected facility that commences construction, modification, or reconstruction on or after April 22, 2008, the owner or operator of the affected facility must conduct an initial Method 9 (40 CFR part 60, Appendix A-4) performance test according to this section and §60.11. (2) If the building encloses only affected facilities that commenced construction, modification, or reconstruction before April 22, 2008, and the owner or operator has previously conducted an initial Method 22 (40 CFR part 60, Appendix A-7) performance test showing zero visible emissions, then the owner or operator has demonstrated compliance with the opacity limit in §60.672(e)(1). If the owner or operator has not conducted an initial performance test for the building before April 22, 2008, then the owner or operator must conduct an initial Method 9 (40 CFR part 60, Appendix A-4) performance test according to this section and §60.11 to show compliance with the opacity limit in §60.672(e)(1).
--	---

(e) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) For the method and procedure of paragraph (c) of this section, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:

(i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.

(ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.

(2) 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 if the following conditions are met:

(i) No more than three emission points may be read concurrently.

(ii) All three emission points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

(iii) If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point.

(3) Method 5I of Appendix A-3 of this part may be used to determine the PM concentration as an alternative to the methods specified in paragraph (b)(1) of this section. Method 5I (40 CFR part 60, Appendix A-3) may be useful for affected facilities that operate for less than 1 hour at a time such as (but not limited to) storage bins or enclosed truck or railcar loading stations.

(4) In some cases, velocities of exhaust gases from building vents may be too low to measure accurately with the type S pitot tube specified in EPA Method 2 of Appendix A-1 of this part [*i.e.*, velocity head <1.3 mm H₂O (0.05 in. H₂O)] and referred to in EPA Method 5 of Appendix A-3 of this part. For these conditions, the owner or operator may determine the average gas flow rate produced by the power fans (*e.g.*, from vendor-supplied fan curves) to the building vent. The owner or operator may calculate the average gas velocity at the building vent measurement site using Equation 1 of this section and use this average velocity in determining and maintaining isokinetic sampling rates.

$$v_e = \frac{Q_f}{A_e} \quad (\text{Eq. 1})$$

Where:

V_e = average building vent velocity (feet per minute);

Q_f = average fan flow rate (cubic feet per minute); and

A_e = area of building vent and measurement location (square feet).

(f) To comply with §60.676(d), the owner or operator shall record the measurements as required in §60.676(c) using the monitoring devices in §60.674 (a)(1) and (2) during each particulate matter run and shall determine the averages.

	(g) For performance tests involving only Method 9 (40 CFR part 60 Appendix A-4) testing, the owner or operator may reduce the 30-day advance notification of performance test in §60.7(a)(6) and 60.8(d) to a 7-day advance notification. (h) [Reserved] (i) If the initial performance test date for an affected facility falls during a seasonal shut down (as defined in §60.671 of this subpart) of the affected facility, then with approval from the permitting authority, the owner or operator may postpone the initial performance test until no later than 60 calendar days after resuming operation of the affected facility.
--	---

Reporting and Recordkeeping

§60.676	(a) Each owner or operator seeking to comply with §60.670(d) shall submit to the Administrator the following information about the existing facility being replaced and the replacement piece of equipment. (1) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station: (i) The rated capacity in megagrams or tons per hour of the existing facility being replaced and (ii) The rated capacity in tons per hour of the replacement equipment. (2) For a screening operation: (i) The total surface area of the top screen of the existing screening operation being replaced and (ii) The total surface area of the top screen of the replacement screening operation. (3) For a conveyor belt: (i) The width of the existing belt being replaced and (ii) The width of the replacement conveyor belt. (4) For a storage bin: (i) The rated capacity in megagrams or tons of the existing storage bin being replaced and (ii) The rated capacity in megagrams or tons of replacement storage bins. (b)(1) Owners or operators of affected facilities (as defined in §§60.670 and 60.671) for which construction, modification, or reconstruction commenced on or after April 22, 2008, must record each periodic inspection required under §60.674(b) or (c), including dates and any corrective actions taken, in a logbook (in written or electronic format). The owner or operator must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Administrator upon request.
----------------	--

(2) For each bag leak detection system installed and operated according to §60.674(d), the owner or operator must keep the records specified in paragraphs (b)(2)(i) through (iii) of this section.

(i) Records of the bag leak detection system output;

(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and

(iii) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the cause of the alarm was alleviated within 3 hours of the alarm.

(3) The owner or operator of each affected facility demonstrating compliance according to §60.674(e) by following the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA) must maintain records of visible emissions observations required by §63.7132(a)(3) and (b) of 40 CFR part 63, subpart AAAAA.

(c) During the initial performance test of a wet scrubber, and daily 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.

(d) 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 and liquid flow rate decrease by more than 30 percent from the average determined during the most recent performance test.

(e) The reports required under paragraph (d) of this section shall be postmarked within 30 days following end of the second and fourth calendar quarters.

(f) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672 of this subpart, including reports of opacity observations made using Method 9 (40 CFR part 60, Appendix A-4) to demonstrate compliance with §60.672(b), (e) and (f).

(g) The owner or operator of any wet material processing operation that processes saturated and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. At the time of such change, this screening operation, bucket elevator, or belt conveyor becomes subject to the applicable opacity limit in §60.672(b) and the emission test requirements of §60.11.

(h) The subpart A requirement under §60.7(a)(1) for notification of the date construction or reconstruction commenced is waived for affected facilities under this subpart.

(i) A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.

(1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

(2) For portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant.

(j) The requirements of this section 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 facilities within the State will be relieved of the obligation to comply with the reporting requirements of this section, provided that they comply with requirements established by the State.

(k) Notifications and reports required under this subpart and under subpart A of this part to demonstrate compliance with this subpart need only to be sent to the EPA Region or the State which has been delegated authority according to §60.4(b).

Table 1 to Subpart OOO of Part 60—Exceptions to Applicability of Subpart A to Subpart OOO

Subpart A reference	Applies to subpart OOO	Explanation
60.4, Address	Yes	Except in §60.4(a) and (b) submittals need not be submitted to both the EPA Region and delegated State authority (§60.676(k)).
60.7, Notification and recordkeeping	Yes	Except in (a)(1) notification of the date construction or reconstruction commenced (§60.676(h)).
		Also, except in (a)(6) performance tests involving only Method 9 (40 CFR part 60, Appendix A-4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.8, Performance tests	Yes	Except in (d) performance tests involving only Method 9 (40 CFR part 60, Appendix A-4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.11, Compliance with standards and maintenance requirements	Yes	Except in (b) under certain conditions (§§60.675(c)), Method 9 (40 CFR part 60, Appendix A-4) observation is reduced from 3 hours to 30 minutes for fugitive emissions.
60.18, General control device	No	Flares will not be used to comply with the emission limits.

Table 2 to Subpart OOO of Part 60—Stack Emission Limits for Affected Facilities With Capture Systems

For	The owner or operator must meet a PM limit of	And the owner or operator must meet an opacity limit of	The owner or operator must demonstrate compliance with these limits by conducting
Affected facilities (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	0.05 g/dscm (0.022 gr/dscf) ^a	7 percent for dry control devices ^b	An initial performance test according to §60.8 of this part and §60.675 of this subpart; and Monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e).
Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	0.032 g/dscm (0.014 gr/dscf) ^a	Not applicable (except for individual enclosed storage bins) 7 percent for dry control devices on individual enclosed storage bins	An initial performance test according to §60.8 of this part and §60.675 of this subpart; and Monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e); and
			Monitoring of baghouses according to §60.674(c), (d), or (e) and §60.676(b).

^aExceptions to the PM limit apply for individual enclosed storage bins and other equipment. See §60.672(d) through (f).

^bThe stack opacity limit and associated opacity testing requirements do not apply for affected facilities using wet scrubbers.

Table 3 to Subpart OOO of Part 60—Fugitive Emission Limits			
For	The owner or operator must meet the following fugitive emissions limit for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility (as defined in §§60.670 and 60.671)	The owner or operator must meet the following fugitive emissions limit for crushers at which a capture system is not used	The owner or operator must demonstrate compliance with these limits by conducting
Affected facilities (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	10 percent opacity	15 percent opacity	An initial performance test according to §60.11 of this part and §60.675 of this subpart.
Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	7 percent opacity	12 percent opacity	An initial performance test according to §60.11 of this part and §60.675 of this subpart; and Periodic inspections of water sprays according to §60.674(b) and §60.676(b); and
			A repeat performance test according to §60.11 of this part and §60.675 of this subpart within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays. Affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in §60.674(b) and §60.676(b) are exempt from this 5-year repeat testing requirement.

FEDERAL REGULATIONS
40 CFR 60 SUBPART IIII
Standards of Performance for Stationary Compression Ignition
Internal Combustion Engines

Applicable provisions of 40 CFR 60 Subpart IIII shall apply.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011, Aug. 10, 2022; 89 FR 70512, Aug. 30, 2024]

General Requirements

§60.4218	The General Provisions in 40 CFR 60.1 through 60.19 apply as specified in Table 8 to Subpart IIII of part 60. [40 CFR 60.4218]
-----------------	--

Emission Standards and Work Practices

§60.4205	1. Each 2007 model year or later CI RICE that are not fire pump engines shall comply with the emission standards in 40 CFR 40.4202 for the same year model year and maximum engine power. You must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(a) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications. [40 CFR 60.4205(b), 40 CFR 60.4211(c)] 2. Each pre-2007 model year RICE that are not fire pump engines shall comply with the emission standards in Table 1 to Subpart IIII of 40 CFR part 60. You must demonstrate compliance according to one of the methods specified in 40 CFR 60.4211(b)(1) through (5). [40 CFR 60.4205(a), 40 CFR 60.4211(b)] 3. Each fire pump CI RICE shall comply with the emission standards in Table 4 to Subpart IIII of 40 CFR part 60. You must demonstrate compliance according to one of the methods specified in 40 CFR 60.4211(b)(1) through (5). [40 CFR 60.4205(c), 40 CFR 60.4211(b)]
§60.4206	Owners and operators of CI RICE must operate and maintain the RICE over the entire life of the engine. [40 CFR 60.4206]
§60.4207	Diesel fuel must meet 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. [40 CFR 60.4207(b)]
§60.4211	1. The owner/operator shall: a. Operate and maintain the CI RICE and control devices according to the manufacturer's emission-related written instructions, b. Change only those emission-related settings that are permitted by the manufacturer; and c. Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you. [40 CFR 60.4211(a)]
	2. You must operate the emergency CI RICE according to the requirements in 40 CFR 60.4211(f)(1) through (3). In order for the engine to be considered an emergency RICE, any operation other than emergency operation, maintenance and testing, emergency demand response, and as otherwise described in 40 CFR 60.4211(f)(1) through (3), is prohibited. If you do not operate the engine according to these requirements, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines. [40 CFR 60.4211(f)]

Monitoring and Recordkeeping Requirements

§60.4209	1. You must install a non-resettable hour meter prior to startup of the engine.[40 CFR 60.4209(a)] 2. If your CI RICE is equipped with a diesel particulate filter, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. You 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. [40 CFR 60.4209(b), 40 CFR 60.4214(c)]
§60.4214	3. Starting with the model years in Table 5 to Subpart IIII of 40 CFR part 60 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. [40 CFR 60.4214(b)]

Reports and Notification

§60.4214	1. If you own or operate an emergency CI RICE 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 40 CFR 60.4211(f)(2)(ii) and (iii), or that operates for the purposes specified in 40 CFR 60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs 40 CFR 60.4214(d)(1) through (3). [40 CFR 60.4214(d)]
-----------------	---

Remainder of Page Intentionally Left Blank

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) of 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, (1) 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 §61.149(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 °C (32 °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.
-------------------	--

Standard for Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations

§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.
----------------	--

Air Cleaning

§61.152	(a) The owner or operator who uses air cleaning, as specified in §§61.142(a), 61.144(b)(2), 61.145(c)(3)(i)(B)(I), 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 m³/min/m² (30 ft³/min/ft²) for woven fabrics or 11³/min/m²(35 ft³/min/ft²) for felted fabrics, except that 12 m³/min/m² (40 ft³min/ft²) for woven and 14 m³/min/m² (45 ft³min/ft²) 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 $\text{m}^3/\text{min}/\text{m}^2$ 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 $\text{m}^3/\text{min}/\text{m}^2$. (2) If a fabric filter device is used to control emissions, (i) The airflow permeability in $\text{m}^3/\text{min}/\text{m}^2$ ($\text{ft}^3/\text{min}/\text{ft}^2$) 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^2), the minimum thickness in millimeters (inches), and the airflow permeability in $\text{m}^3/\text{min}/\text{m}^2$ ($\text{ft}^3/\text{min}/\text{ft}^2$). (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 m^3/day (yd^3/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.
-----------------------	--

Remainder of Page Intentionally Left Blank

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; 89 FR 73307, Sept. 10, 2024; 90 FR 1041, Jan. 7, 2025; 91 FR 60, Jan. 2, 2026]

Applicability

§63.1(a)	<i>General.</i> (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]
-----------------	--

§63.1(a)	(10) For the purposes of this part, time periods specified in days shall be measured in calendar days, 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).
§63.1(b)	(b) <i>Initial applicability determination for this part.</i> (1) The provisions of this part apply to the owner or 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).
§63.1(c)	(c) <i>Applicability of this part after a relevant standard has been set under this part.</i> (1) If a relevant 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.

Remainder of Page Intentionally Left Blank

FEDERAL REGULATIONS
40 CFR 63 SUBPART AAAA
National Emission Standards for Hazardous Air Pollutants:
Municipal Solid Waste Landfills

Applicable provisions of 40 CFR 63 Subpart AAAA shall apply.

[85 FR 17261, Mar. 26, 2020, as amended at 85 FR 64400, Oct. 13, 2020; 87 FR 8203, Feb. 14, 2022]

Purpose

§63.1930	This subpart establishes national emission standards for hazardous air pollutants for existing and new municipal solid waste (MSW) landfills. (a) Before September 28, 2021, all landfills described in § 63.1935 must meet the requirements of 40 CFR part 60, subpart WWW, or an approved state or federal plan that implements 40 CFR part 60, subpart Cc, and requires timely control of bioreactors and additional reporting requirements. Landfills must also meet the startup, shutdown, and malfunction (SSM) requirements of the general provisions as specified in Table 1 to subpart AAAA of this part and must demonstrate compliance with the operating conditions by parameter monitoring results that are within the specified ranges. Specifically, landfills must meet the following requirements of this subpart that apply before September 28, 2021, as set out in: §§ 63.1955(a), 63.1955(b), 63.1965(a), 63.1965(c), 63.1975, 63.1981(a), 63.1981(b), and 63.1982, and the definitions of “Controlled landfill” and “Deviation” in § 63.1990. (b) Beginning no later than September 27, 2021, all landfills described in § 63.1935 must meet the requirements of this subpart. A landfill may choose to meet the requirements of this subpart rather than the requirements identified in § 63.1930(a) at any time before September 27, 2021. The requirements of this subpart apply at all times, including during periods of SSM, and the SSM requirements of the General Provisions of this part do not apply.
-----------------	---

Applicability

§63.1935	You are subject to this subpart if you meet the criteria in paragraph (a) or (b) of this section. (a) You are subject to this subpart if you own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition and meets any one of the three criteria in paragraphs (a)(1) through (3) of this section: (1) Your MSW landfill is a major source as defined in 40 CFR 63.2 of subpart A. (2) Your MSW landfill is collocated with a major source as defined in 40 CFR 63.2 of subpart A. (3) Your MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC as calculated according to § 63.1959.
-----------------	--

§63.1935	(b) You are subject to this subpart if you own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition, that includes a bioreactor, as defined in §63.1990, and that meets any one of the criteria in paragraphs (b)(1) through (3) of this section: (1) Your MSW landfill is a major source as defined in 40 CFR 63.2 of subpart A. (2) Your MSW landfill is collocated with a major source as defined in 40 CFR 63.2 of subpart A. (3) Your MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m³ and that is not permanently closed as of January 16, 2003.
-----------------	--

Affected Source

§63.1940	a) An affected source of this subpart is a MSW landfill, as defined in §63.1990, that meets the criteria in §63.1935(a) or (b). The affected source includes the entire disposal facility in a contiguous geographic space where household waste is placed in or on land, including any portion of the MSW landfill operated as a bioreactor. (b) A new affected source of this subpart is an affected source that commenced construction or reconstruction after November 7, 2000. An affected source is reconstructed if it meets the definition of reconstruction in 40 CFR 63.2 of subpart A. (c) An affected source of this subpart is existing if it is not new.
-----------------	---

Compliance Dates

§63.1945	(a) If your landfill is a new affected source, you must comply with this subpart by January 16, 2003 or at the time you begin operating, whichever is last. (b) If your landfill is an existing affected source, you must comply with this subpart by January 16, 2004.
-----------------	---

Exemption

§63.1950	You are no longer required to comply with the requirements of this subpart when your landfill meets the collection and control system removal criteria in § 63.1957(b).
-----------------	--

Requirements

§63.1955	(a) Before September 28, 2021, if alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping, or reporting provisions have already been approved under 40 CFR part 60, subpart WWW; subpart XXX; a federal plan; or an EPA-approved and effective state or tribal plan, these alternatives can be used to comply with this subpart, except that all affected sources must comply with the SSM requirements in subpart A of this part as specified in Table 1 of this subpart and all affected sources must submit compliance reports every 6 months as specified in § 63.1981(h), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3-hour monitoring block average. Beginning no later than September 28, 2021, the collection and control system design plan may include for approval collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping, or reporting provisions, as provided in § 63.1981(d)(2). (b) If you own or operate a bioreactor that is located at an MSW landfill that is not permanently closed and has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m³, then you must meet the requirements of this subpart, including requirements in paragraphs (b)(1) and (2) of this section. (1) You must comply with this subpart starting on the date you are required to install the gas collection and control system. (2) You must extend the collection and control system into each new cell or area of the bioreactor prior to initiating liquids addition in that area. (c) At all times, beginning no later than September 27, 2021, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if the requirements of this subpart have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements 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.
-----------------	--

Compliance Determination

§63.1964	Compliance is determined using performance testing, collection system monitoring, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data collected under § 63.1961(b)(1) , (c)(1) , and (d) are used to demonstrate compliance with the operating standards for control systems. If a deviation occurs, you have failed to meet the control device operating standards described in this subpart and have deviated from the requirements of this subpart.
-----------------	--

§63.1964	(a) Before September 28, 2021, you must develop a written SSM plan according to the provisions in § 63.6(e)(3) of subpart A. A copy of the SSM plan must be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements of this subpart. (b) After September 27, 2021, the SSM provisions of § 63.6(e) of subpart A no longer apply to this subpart and the SSM plan developed under paragraph (a) of this section no longer applies. Compliance with the emissions standards and the operating standards of § 63.1958 of this subpart is required at all times.
-----------------	---

Deviation

§63.1965	A deviation is defined in §63.1990. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in paragraphs (a) through (c) of this section. (a) A deviation occurs when the control device operating parameter boundaries described in § 63.1983(c)(1) are exceeded. (b) A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour. (c) Before September 28, 2021, a deviation occurs when a SSM plan is not developed or maintained on site and when an affected source fails to meet any emission limitation, (including any operating limit), or work practice requirement in this subpart during SSM, regardless of whether or not such failure is permitted by this subpart.
-----------------	--

3-Hour Block Average Calculation

§63.1975	Before September 28, 2021, averages are calculated in the same way as they are calculated in § 60.758(b)(2)(i) of this subchapter for average combustion temperature and § 60.758(c) for 3-hour average combustion temperature for enclosed combustors, except that the data collected during the events listed in paragraphs (a) through (d) of this section are not to be included in any average computed under this subpart. Beginning no later than September 27, 2021, averages are calculated according to § 63.1983(b)(2)(i) for average combustion temperature and § 63.1983(c)(1)(i) for 3-hour average combustion temperature for enclosed combustors, except that the data collected during the event listed in paragraph (a) of this section are not to be included in any average computed under this subpart. (a) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments. (b) Startups. (c) Shutdowns. (d) Malfunctions.
-----------------	---

Records and Reports

§63.1981	You must submit the reports specified in this section and the reports specified in Table 1 to this subpart. If you have previously submitted a design capacity report, amended design capacity report, initial NMOC emission rate report, initial or revised collection and control system design plan, closure report, equipment removal report, or initial performance test under 40 CFR part 60, subpart WWW; 40 CFR part 60, subpart XXX; or a federal plan or EPA-approved and effective state plan or tribal plan that implements either 40 CFR part 60, subpart Cc or 40 CFR part 60, subpart Cf, then that submission constitutes compliance with the design capacity report in paragraph (a) of this section, the amended design capacity report in paragraph (b) of this section, the initial NMOC emission rate report in paragraph (c) of this section, the initial collection and control system design plan in paragraph (d) of this section, the revised design plan in paragraph (e) of this section, the closure report in paragraph (f) of this section, the equipment removal report in paragraph (g) of this section, and the initial performance test report in paragraph (i) of this section. You do not need to re-submit the report(s). However, you must include a statement certifying prior submission of the respective report(s) and the date of submittal in the first semi-annual report required in this section.																																													
§63.1983	You must keep records as specified in this subpart. You must also keep records as specified in the general provisions of 40 CFR part 63 as shown in Table 1 to this subpart. (a) Except as provided in § 63.1981(d)(2), each owner or operator of an MSW landfill subject to the provisions of § 63.1959(b)(2)(ii) and (iii) of this chapter must keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report that triggered § 63.1959(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable. (b) Except as provided in § 63.1981(d)(2), each owner or operator of a controlled landfill must keep up-to-date, readily accessible records for the life of the control system equipment of the data listed in paragraphs (b)(1) through (5) of this section as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring must be maintained for a minimum of 5 years. Records of the control device vendor specifications must be maintained until removal. Table 1 to Subpart AAAA of Part 63—Applicability of NESHAP General Provisions to Subpart AAAA <table><tr><th>Part 63 citation</th><th>Description</th><th>Applicable to subpart AAAA before September 28, 2021</th><th>Applicable to subpart AAAA no later than September 27, 2021</th><th>Explanation</th></tr><tr><td>§ 63.1(a)</td><td>Applicability: General applicability of NESHAP in this part</td><td>Yes</td><td>Yes</td><td></td></tr><tr><td>§ 63.1(b)</td><td>Applicability determination for stationary sources</td><td>Yes</td><td>Yes</td><td></td></tr><tr><td>§ 63.1(c)</td><td>Applicability after a standard has been set</td><td>No ¹</td><td>Yes</td><td></td></tr><tr><td>§ 63.1(e)</td><td>Applicability of permit program before relevant standard is set</td><td>Yes</td><td>Yes</td><td></td></tr><tr><td>§ 63.2</td><td>Definitions</td><td>Yes</td><td>Yes</td><td></td></tr><tr><td>§ 63.3</td><td>Units and abbreviations</td><td>No ¹</td><td>Yes</td><td></td></tr><tr><td>§ 63.4</td><td>Prohibited activities and circumvention</td><td>Yes</td><td>Yes</td><td></td></tr><tr><td>§ 63.5(a)</td><td>Construction/reconstruction</td><td>No ¹</td><td>Yes</td><td></td></tr></table>	Part 63 citation	Description	Applicable to subpart AAAA before September 28, 2021	Applicable to subpart AAAA no later than September 27, 2021	Explanation	§ 63.1(a)	Applicability: General applicability of NESHAP in this part	Yes	Yes		§ 63.1(b)	Applicability determination for stationary sources	Yes	Yes		§ 63.1(c)	Applicability after a standard has been set	No ¹	Yes		§ 63.1(e)	Applicability of permit program before relevant standard is set	Yes	Yes		§ 63.2	Definitions	Yes	Yes		§ 63.3	Units and abbreviations	No ¹	Yes		§ 63.4	Prohibited activities and circumvention	Yes	Yes		§ 63.5(a)	Construction/reconstruction	No ¹	Yes	
Part 63 citation	Description	Applicable to subpart AAAA before September 28, 2021	Applicable to subpart AAAA no later than September 27, 2021	Explanation																																										
§ 63.1(a)	Applicability: General applicability of NESHAP in this part	Yes	Yes																																											
§ 63.1(b)	Applicability determination for stationary sources	Yes	Yes																																											
§ 63.1(c)	Applicability after a standard has been set	No ¹	Yes																																											
§ 63.1(e)	Applicability of permit program before relevant standard is set	Yes	Yes																																											
§ 63.2	Definitions	Yes	Yes																																											
§ 63.3	Units and abbreviations	No ¹	Yes																																											
§ 63.4	Prohibited activities and circumvention	Yes	Yes																																											
§ 63.5(a)	Construction/reconstruction	No ¹	Yes																																											

	§ 63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	Yes	Yes	
	§ 63.5(d)	Application for approval of construction or reconstruction	No ₁	Yes	
	§ 63.5(e) and (f)	Approval of construction and reconstruction	No ₁	Yes	
	§ 63.6(a)	Compliance with standards and maintenance requirements—applicability	No ₁	Yes	
	§ 63.6(b) and (c)	Compliance dates for new, reconstructed, and existing sources	No ₁	Yes	
	§ 63.6(e)(1)(i)-(ii)	Operation and maintenance requirements	Yes	No	See § 63.1955(c) for general duty requirements.
	§ 63.6(e)(3)(i)-(ix)	SSM plan	Yes	No	
	§ 63.6(f)(1)	Exemption of nonopacity emission standards during SSM	No	No	
	§ 63.6(f)(2) and (3)	Compliance with nonopacity emission standards	Yes	Yes	
	§ 63.6(g)	Use of an alternative nonopacity standard	No ₁	Yes	
	§ 63.6(h)	Compliance with opacity and visible emission standards	No ₁	No	Subpart AAAA does not prescribe opacity or visible emission standards.
	§ 63.6(i)	Extension of compliance with emission standards	No ₁	Yes	
	§ 63.6(j)	Exemption from compliance with emission standards	No ₁	Yes	
	§ 63.7	Performance testing	No ₁	Yes	
	§ 63.7(e)(1)	Conditions for performing performance tests	No ₁	No	40 CFR 63.1959(f) specifies the conditions for performing performance tests.
	§ 63.8(a) and (b)	Monitoring requirements—Applicability and conduct of monitoring	No ₁	Yes	
	§ 63.8(c)(1)	Operation and Maintenance of continuous emissions monitoring system	No ₁	Yes	
	§ 63.8(c)(1)(i)	Operation and Maintenance Requirements	No ₁	No	Unnecessary due to the requirements of § 63.8(c)(1) and the requirements for a quality control plan for monitoring equipment in § 63.8(d)(2) .
	§ 63.8(c)(1)(ii)	Operation and Maintenance Requirements	No ₁	No	
	§ 63.8(c)(1)(iii)	SSM plan for monitors	No ₁	No	
	§ 63.8(c)(2)-(8)	Monitoring requirements	No ₁	Yes	

	§ 63.8(d)(1)	Quality control for monitors	No ₁	Yes	
	§ 63.8(d)(2)	Quality control for monitors	No ₁	Yes	
	§ 63.8(d)(3)	Quality control records	No ₁	No	See § 63.1983(c)(8) .
	§ 63.9(a), (c), and (d)	Notifications	No ₁	Yes	
	§ 63.9(b)	Initial notifications	No ₁	Yes ₂	
	§ 63.9(e)	Notification of performance test	No ₁	Yes ₂	
	§ 63.9(f)	Notification of visible emissions/opacity test	No ₁	No	Subpart AAAA does not prescribe opacity or visible emission standards.
	§ 63.9(g)	Notification when using CMS	No ₁	Yes ₂	
	§ 63.9(h)	Notification of compliance status	No ₁	Yes ₂	
	§ 63.9(i)	Adjustment of submittal deadlines	No ₁	Yes	
	§ 63.9(j)	Change in information already provided	No ₁	Yes	
	§ 63.10(a)	Recordkeeping and reporting—general	No ₁	Yes	
	§ 63.10(b)(1)	General recordkeeping	No ₁	Yes	
	§ 63.10(b)(2)(i)	Startup and shutdown records	Yes	No	See § 63.1983(c)(6) for recordkeeping for periods of startup and shutdown.
	§ 63.10(b)(2)(ii)	Recordkeeping of failures to meet a standard	Yes	No	See § 63.1983(c)(6)-(7) for recordkeeping for any exceedance of a standard.
	§ 63.10(b)(2)(iii)	Recordkeeping of maintenance on air pollution control equipment	Yes	Yes	
	§ 63.10(b)(2)(iv)-(v)	Actions taken to minimize emissions during SSM	Yes	No	See § 63.1983(c)(7) for recordkeeping of corrective actions to restore compliance.
	§ 63.10(b)(2)(vi)	Recordkeeping for CMS malfunctions	No ₁	Yes	
	§ 63.10(b)(2)(vii)-(xiv)	Other Recordkeeping of compliance measurements	No ₁	Yes	
	§ 63.10(c)	Additional recordkeeping for sources with CMS	No ₁	No	See § 63.1983 for required CMS recordkeeping.
	§ 63.10(d)(1)	General reporting	No ₁	Yes	
	§ 63.10(d)(2)	Reporting of performance test results	No ₁	Yes	
	§ 63.10(d)(3)	Reporting of visible emission observations	No ₁	No	
	§ 63.10(d)(4)	Progress reports for compliance date extensions	No ₁	Yes	

	§ 63.10(d)(5)	SSM reporting	Yes	No	All exceedances must be reported in the semi-annual report required by § 63.1981(h) .
	§ 63.10(e)	Additional reporting for CMS systems	No ¹	Yes	
	§ 63.10(f)	Recordkeeping/reporting waiver	No ¹	Yes	
	§ 63.11	Control device requirements/flares	No ¹	Yes	§ 60.18 is required before September 27, 2021. However, § 60.18 and 63.11 are equivalent.
	§ 63.12(a)	State authority	Yes	Yes	
	§ 63.12(b)-(c)	State delegations	No ¹	Yes	
	§ 63.13	Addresses	No ¹	Yes	
	§ 63.14	Incorporation by reference	No ¹	Yes	
	§ 63.15	Availability of information and confidentiality	Yes	Yes	
¹ Before September 28, 2021, this subpart requires affected facilities to follow 40 CFR part 60, subpart WWW , which incorporates the General Provisions of 40 CFR part 60 .					
² If an owner or operator has complied with requirements that are parallel to the requirements of the part 63 citation of this table under 40 CFR part 60, subpart WWW or subpart XXX, or a state or federal plan that implements 40 CFR part 60, subpart Cc or Cf , then additional notification for that requirement is not required.					

Remainder of Page Intentionally Left Blank

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 3606](#), Jan. 18, 2008; [75 FR 9676](#), Mar. 3, 2010; [75 FR 51589](#), Aug. 20, 2010; [76 FR 12866](#), Mar. 9, 2011; [78 FR 6703](#), Jan. 30, 2013; [89 FR 70516](#), Aug. 30, 2024]

General Requirements

§63.6605	1. You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times. [40 CFR 63.6605(a)] 2. At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. 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. [40 CFR 63.6605(b)]
§63.6665	Table 8 to Subpart ZZZZ of 40 CFR part 63 shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. [40 CFR 63.6665]

Monitoring and Recordkeeping Requirements

§63.6625	1. You must operate and maintain the existing emergency RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e)(4)] 2. You must install a non-resettable hour meter on existing emergency RICE if one is not already installed. [40 CFR 63.6625(f)] 3. You must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(g)] 4. You have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c to Subpart ZZZZ of 40 CFR part 63. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c. The analysis program must be conducted and implemented according to 40 CFR 63.6625(i) for CI engines and according to 40 CFR 63.6625(i) for SI RICE. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i)]
-----------------	--

§63.6640	In order for the engine to be considered an emergency stationary RICE, you must operate the emergency RICE according to the requirements in 40 CFR 63.6640(f)(1) through (4). If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under Subpart ZZZZ and must meet all requirements for non-emergency engines. [40 CFR 63.6640(f)]
§63.6655	1. You must keep records of the maintenance conducted on the existing emergency RICE in order to demonstrate that you operated and maintained the RICE and after-treatment control device (if any) according to your own maintenance plan. [40 CFR 63.6655(e)] 2. You must keep records of the hours of operation of the existing emergency RICE that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR 63.6640(f)(2)(ii) or (iii) or 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 CFR 63.6655(f)]
§63.6660	You must maintain records consistent with 40 CFR 63.10(b): Your records must be in a form suitable and readily available for expeditious review. You must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. You must keep each record readily accessible in hard copy or electronic form. [40 CFR 63.6660, 40 CFR 63.10(b)]

Reports and Notifications

§63.6650	1. You must report each instance in which you did not meet each applicable operating limitation in Table 2c to Subpart ZZZZ of 40 CFR part 63. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.6650. [40 CFR 63.6640(b)] 2. You must submit the reports in Table 7, Item 3 to Subpart ZZZZ of 40 CFR part 63, if applicable: a. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) or that operate for the purposes specified in 40 CFR 63.6640(f)(4)(ii) i. The report must contain The information in 40 CFR 63.6650(h)(1). ii. You must submit the report annually according to the requirements in 40 CFR 63.6650(h)(2)-(3). [40 CFR 63.6650]
-----------------	---

Remainder of Page Intentionally Left Blank

FEDERAL REGULATIONS
40 CFR 63 SUBPART CCCCCC
National Emission Standards for Hazardous Air Pollutants for Source Category:
Gasoline Dispensing Facilities

Applicable provisions of 40 CFR 63 Subpart CCCCCC shall apply.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4181, Jan. 24, 2011]

Applicability

§63.11111	(a) The affected source to which this subpart applies is each GDF that is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank. (c) If your GDF has a monthly throughput of 10,000 gallons of gasoline or more, you must comply with the requirements in §63.11117. (e) An affected source shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. For new or reconstructed affected sources, as specified in §63.11112(b) and (c), recordkeeping to document monthly throughput must begin upon startup of the affected source. For existing sources, as specified in §63.11112(d), recordkeeping to document monthly throughput must begin on January 10, 2008. For existing sources that are subject to this subpart only because they load gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, recordkeeping to document monthly throughput must begin on January 24, 2011. Records required under this paragraph shall be kept for a period of 5 years. (f) If you are an owner or operator of affected sources, as defined in paragraph (a) of this section, you are not required to obtain a permit under 40 CFR part 70 or 40 CFR part 71 as a result of being subject to this subpart. However, you must still apply for and obtain a permit under 40 CFR part 70 or 40 CFR part 71 if you meet one or more of the applicability criteria found in 40 CFR 70.3(a) and (b) or 40 CFR 71.3(a) and (b). (g) The loading of aviation gasoline into storage tanks at airports, and the subsequent transfer of aviation gasoline within the airport, is not subject to this subpart. (h) Monthly throughput is the total volume of gasoline loaded into, or dispensed from, all the gasoline storage tanks located at a single affected GDF. If an area source has two or more GDF at separate locations within the area source, each GDF is treated as a separate affected source. (i) If your affected source's throughput ever exceeds an applicable throughput threshold, the affected source will remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable throughput threshold. (j) The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to §63.11116 of this subpart.
------------------	---

§63.11111	(k) For any affected source subject to the provisions of this subpart and another Federal rule, you may elect to comply only with the more stringent provisions of the applicable subparts. You must consider all provisions of the rules, including monitoring, recordkeeping, and reporting. You must identify the affected source and provisions with which you will comply in your Notification of Compliance Status required under §63.11124. You also must demonstrate in your Notification of Compliance Status that each provision with which you will comply is at least as stringent as the otherwise applicable requirements in this subpart. You are responsible for making accurate determinations concerning the more stringent provisions, and noncompliance with this rule is not excused if it is later determined that your determination was in error, and, as a result, you are violating this subpart. Compliance with this rule is your responsibility and the Notification of Compliance Status does not alter or affect that responsibility.
§63.11112	(a) The emission sources to which this subpart applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDF that meet the criteria specified in §63.11111. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by this subpart. (b) An affected source is a new affected source if you commenced construction on the affected source after November 9, 2006, and you meet the applicability criteria in §63.11111 at the time you commenced operation. (c) An affected source is reconstructed if you meet the criteria for reconstruction as defined in §63.2. (d) An affected source is an existing affected source if it is not new or reconstructed.
§63.11113	(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section, except as specified in paragraph (d) of this section. (1) If you start up your affected source before January 10, 2008, you must comply with the standards in this subpart no later than January 10, 2008. (2) If you start up your affected source after January 10, 2008, you must comply with the standards in this subpart upon startup of your affected source. (b) If you have an existing affected source, you must comply with the standards in this subpart no later than January 10, 2011. (c) If you have an existing affected source that becomes subject to the control requirements in this subpart because of an increase in the monthly throughput, as specified in §63.11111(c) or §63.11111(d), you must comply with the standards in this subpart no later than 3 years after the affected source becomes subject to the control requirements in this subpart. (d) If you have a new or reconstructed affected source and you are complying with Table 1 to this subpart, you must comply according to paragraphs (d)(1) and (2) of this section. (1) If you start up your affected source from November 9, 2006 to September 23, 2008, you must comply no later than September 23, 2008. (2) If you start up your affected source after September 23, 2008, you must comply upon startup of your affected source.

§63.11113	(e) The initial compliance demonstration test required under §63.11120(a)(1) and (2) must be conducted as specified in paragraphs (e)(1) and (2) of this section. (1) If you have a new or reconstructed affected source, you must conduct the initial compliance test upon installation of the complete vapor balance system. (2) If you have an existing affected source, you must conduct the initial compliance test as specified in paragraphs (e)(2)(i) or (e)(2)(ii) of this section. (i) For vapor balance systems installed on or before December 15, 2009, you must test no later than 180 days after the applicable compliance date specified in paragraphs (b) or (c) of this section. (ii) For vapor balance systems installed after December 15, 2009, you must test upon installation of the complete vapor balance system. (f) If your GDF is subject to the control requirements in this subpart only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, you must comply with the standards in this subpart as specified in paragraphs (f)(1) or (f)(2) of this section. (1) If your GDF is an existing facility, you must comply by January 24, 2014. (2) If your GDF is a new or reconstructed facility, you must comply by the dates specified in paragraphs (f)(2)(i) and (ii) of this section. (i) If you start up your GDF after December 15, 2009, but before January 24, 2011, you must comply no later than January 24, 2011. (ii) If you start up your GDF after January 24, 2011, you must comply upon startup of your GDF.
------------------	---

Emission Limitations and Management Practices

§63.11115	Each owner or operator of an affected source under this subpart must comply with the requirements of paragraphs (a) and (b) of this section. (a) You must, at all times, operate and maintain any affected source, including associated air pollution 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. (b) You must keep applicable records and submit reports as specified in §63.11125(d) and §63.11126(b).
§63.11117	(a) You must comply with the requirements in section §63.11116(a). (b) Except as specified in paragraph (c) of this section, you must only load gasoline into storage tanks at your facility by utilizing submerged filling, as defined in §63.11132, and as specified in paragraphs (b)(1), (b)(2), or (b)(3) of this section. The applicable distances in paragraphs (b)(1) and (2) shall be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank.

	(1) Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the tank. (2) Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the tank. (3) Submerged fill pipes not meeting the specifications of paragraphs (b)(1) or (b)(2) of this section are allowed if the owner or operator can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by the Administrator's delegated representative during the course of a site visit. (c) Gasoline storage tanks with a capacity of less than 250 gallons are not required to comply with the submerged fill requirements in paragraph (b) of this section, but must comply only with all of the requirements in §63.11116. (d) You must have records available within 24 hours of a request by the Administrator to document your gasoline throughput. (e) You must submit the applicable notifications as required under §63.11124(a). (f) You must comply with the requirements of this subpart by the applicable dates contained in §63.11113.
--	--

Testing and Monitoring Requirements

§63.11120	(a) Each owner or operator, at the time of installation, as specified in §63.11113(e), of a vapor balance system required under §63.11118(b)(1), and every 3 years thereafter, must comply with the requirements in paragraphs (a)(1) and (2) of this section. (1) You must demonstrate compliance with the leak rate and cracking pressure requirements, specified in item 1(g) of Table 1 to this subpart, for pressure-vacuum vent valves installed on your gasoline storage tanks using the test methods identified in paragraph (a)(1)(i) or paragraph (a)(1)(ii) of this section. (i) California Air Resources Board Vapor Recovery Test Procedure TP-201.1E,—Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted October 8, 2003 (incorporated by reference, see §63.14). (ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in §63.7(f). (2) You must demonstrate compliance with the static pressure performance requirement specified in item 1(h) of Table 1 to this subpart for your vapor balance system by conducting a static pressure test on your gasoline storage tanks using the test methods identified in paragraphs (a)(2)(i), (a)(2)(ii), or (a)(2)(iii) of this section. (i) California Air Resources Board Vapor Recovery Test Procedure TP-201.3,—Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended March 17, 1999 (incorporated by reference, see §63.14).
------------------	--

	(ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in §63.7(f). (iii) Bay Area Air Quality Management District Source Test Procedure ST-30—Static Pressure Integrity Test—Underground Storage Tanks, adopted November 30, 1983, and amended December 21, 1994 (incorporated by reference, <i>see</i> §63.14). (b) Each owner or operator choosing, under the provisions of §63.6(g), to use a vapor balance system other than that described in Table 1 to this subpart must demonstrate to the Administrator or delegated authority under paragraph §63.11131(a) of this subpart, the equivalency of their vapor balance system to that described in Table 1 to this subpart using the procedures specified in paragraphs (b)(1) through (3) of this section. (1) You must demonstrate initial compliance by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95 percent reduction using the California Air Resources Board Vapor Recovery Test Procedure TP-201.1,—Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003, (incorporated by reference, <i>see</i> §63.14). (2) You must, during the initial performance test required under paragraph (b)(1) of this section, determine and document alternative acceptable values for the leak rate and cracking pressure requirements specified in item 1(g) of Table 1 to this subpart and for the static pressure performance requirement in item 1(h) of Table 1 to this subpart. (3) You must comply with the testing requirements specified in paragraph (a) of this section. (c) Conduct of performance tests. Performance tests conducted for this subpart shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (<i>i.e.</i>, performance based on normal operating conditions) of the affected source. 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. (d) Owners and operators of gasoline cargo tanks subject to the provisions of Table 2 to this subpart must conduct annual certification testing according to the vapor tightness testing requirements found in §63.11092(f).
--	---

Notifications, Records, and Reports

§63.11124	(a) Each owner or operator subject to the control requirements in §63.11117 must comply with paragraphs (a)(1) through (3) of this section. (1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in §63.11117, unless you meet the requirements in paragraph (a)(3) of this section. If your affected source is subject to the control requirements in §63.11117 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, you must submit the Initial Notification by May 24, 2011. The Initial Notification must contain the information specified in paragraphs (a)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in §63.13.
------------------	--

	(i) The name and address of the owner and the operator. (ii) The address (i.e., physical location) of the GDF. (iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of §63.11117 that apply to you. (2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in §63.13, within 60 days of the applicable compliance date specified in §63.11113, unless you meet the requirements in paragraph (a)(3) of this section. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facilities' monthly throughput is calculated based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (a)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (a)(1) of this section. (3) If, prior to January 10, 2008, you are operating in compliance with an enforceable State, local, or tribal rule or permit that requires submerged fill as specified in §63.11117(b), you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (a)(1) or paragraph (a)(2) of this section. (b) Each owner or operator subject to the control requirements in §63.11118 must comply with paragraphs (b)(1) through (5) of this section. (1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in §63.11118. If your affected source is subject to the control requirements in §63.11118 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, you must submit the Initial Notification by May 24, 2011. The Initial Notification must contain the information specified in paragraphs (b)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in §63.13. (i) The name and address of the owner and the operator. (ii) The address (i.e., physical location) of the GDF. (iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of §63.11118 that apply to you. (2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in §63.13, in accordance with the schedule specified in §63.9(h). The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facility's throughput is determined based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (b)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (b)(1) of this section.
--	---

	(3) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(3)(i) and (ii) of this section, you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (b)(1) or paragraph (b)(2) of this subsection. (i) You operate a vapor balance system at your gasoline dispensing facility that meets the requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section. (A) Achieves emissions reduction of at least 90 percent. (B) Operates using management practices at least as stringent as those in Table 1 to this subpart. (ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section. (4) You must submit a Notification of Performance Test, as specified in §63.9(e), prior to initiating testing required by §63.11120(a) and (b). (5) You must submit additional notifications specified in §63.9, as applicable.
§63.11125	(a) Each owner or operator subject to the management practices in §63.11118 must keep records of all tests performed under §63.11120(a) and (b). (b) Records required under paragraph (a) of this section shall be kept for a period of 5 years and shall be made available for inspection by the Administrator's delegated representatives during the course of a site visit. (c) Each owner or operator of a gasoline cargo tank subject to the management practices in Table 2 to this subpart must keep records documenting vapor tightness testing for a period of 5 years. Documentation must include each of the items specified in §63.11094(b)(2)(i) through (viii). Records of vapor tightness testing must be retained as specified in either paragraph (c)(1) or paragraph (c)(2) of this section. (1) The owner or operator must keep all vapor tightness testing records with the cargo tank. (2) As an alternative to keeping all records with the cargo tank, the owner or operator may comply with the requirements of paragraphs (c)(2)(i) and (ii) of this section. (i) The owner or operator may keep records of only the most recent vapor tightness test with the cargo tank, and keep records for the previous 4 years at their office or another central location. (ii) Vapor tightness testing records that are kept at a location other than with the cargo tank must be instantly available (<i>e.g.</i>, via e-mail or facsimile) to the Administrator's delegated representative during the course of a site visit or within a mutually agreeable time frame. Such records must be an exact duplicate image of the original paper copy record with certifying signatures. (d) Each owner or operator of an affected source under this subpart shall keep records as specified in paragraphs (d)(1) and (2) of this section. (1) Records of the occurrence and duration of each malfunction of operation (<i>i.e.</i>, process equipment) or the air pollution control and monitoring equipment.

	(2) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
§63.11126	(a) Each owner or operator subject to the management practices in §63.11118 shall report to the Administrator the results of all volumetric efficiency tests required under §63.11120(b). Reports submitted under this paragraph must be submitted within 180 days of the completion of the performance testing. (b) Each owner or operator of an affected source under this subpart shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year 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 §63.11115(a), including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred.

Remainder of Page Intentionally Left Blank

General Provisions

§63.11132	Table 1 to Subpart CCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More¹	
	If you own or operate	Then you must
	1. A new, reconstructed, or existing GDF subject to §63.11118	Install and operate a vapor balance system on your gasoline storage tanks that meets the design criteria in paragraphs (a) through (h).
		(a) All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnect.
		(b) The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor-tight, as defined in §63.11132.
		(c) The vapor balance system shall be designed such that the pressure in the tank truck does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer.
		(d) The vapor recovery and product adaptors, and the method of connection with the delivery elbow, shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations.
		(e) If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in §63.11117(b).
		(f) Liquid fill connections for all systems shall be equipped with vapor-tight caps.
		(g) Pressure/vacuum (PV) vent valves shall be installed on the storage tank vent pipes. The pressure specifications for PV vent valves shall be: a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water.
		(h) The vapor balance system shall be capable of meeting the static pressure performance requirement of the following equation:
		$P_f = 2e^{-500.887/v}$
		Where:
		P_f = Minimum allowable final pressure, inches of water.
		v = Total ullage affected by the test, gallons.
		e = Dimensionless constant equal to approximately 2.718.
		2 = The initial pressure, inches water.
	2. A new or reconstructed GDF, or any storage tank(s) constructed after November 9, 2006, at an existing affected facility subject to §63.11118	Equip your gasoline storage tanks with a dual-point vapor balance system, as defined in §63.11132, and comply with the requirements of item 1 in this Table.

¹The management practices specified in this Table are not applicable if you are complying with the requirements in §63.11118(b)(2), except that if you are complying with the requirements in §63.11118(b)(2)(i)(B), you must operate using management practices at least as stringent as those listed in this Table.

Table 2 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Cargo Tanks Unloading at Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More

If you own or operate	Then you must
A gasoline cargo tank	Not unload gasoline into a storage tank at a GDF subject to the control requirements in this subpart unless the following conditions are met:
	(i) All hoses in the vapor balance system are properly connected,
	(ii) The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect,
	(iii) All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight,
	(iv) All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the GDF storage tank, and
	(v) All hatches on the tank truck are closed and securely fastened.
	(vi) The filling of storage tanks at GDF shall be limited to unloading from vapor-tight gasoline cargo tanks. Documentation that the cargo tank has met the specifications of EPA Method 27 shall be carried with the cargo tank, as specified in §63.11125(c).

Table 3 to Subpart CCCCCC of Part 63—Applicability of General Provisions

Citation	Subject	Brief description	Applies to subpart CCCCCC
§63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications	Yes, specific requirements given in §63.11111.
§63.1(c)(2)	Title V Permit	Requirements for obtaining a title V permit from the applicable permitting authority	Yes, §63.11111(f) of subpart CCCCCC exempts identified area sources from the obligation to obtain title V operating permits.
§63.2	Definitions	Definitions for part 63 standards	Yes, additional definitions in §63.11132.
§63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
§63.4	Prohibited Activities and Circumvention	Prohibited activities; Circumvention, severability	Yes.

§63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes, except that these notifications are not required for facilities subject to §63.11116
§63.6(a)	Compliance with Standards/Operation & Maintenance—Applicability	General Provisions apply unless compliance extension; General Provisions apply to area sources that become major	Yes.
§63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for CAA section 112(f)	Yes.
§63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes.
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source	No.
§63.6(c)(1)-(2)	Compliance Dates for Existing Sources	Comply according to date in this subpart, which must be no later than 3 years after effective date; for CAA section 112(f) standards, comply within 90 days of effective date unless compliance extension	No, §63.11113 specifies the compliance dates.
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Area sources That become major must comply with major source standards by date indicated in this subpart or by equivalent time period (e.g., 3 years)	No.
§63.6(d)	[Reserved]		
63.6(e)(1)(i)	General duty to minimize emissions	Operate to minimize emissions at all times; information Administrator will use to determine if operation and maintenance requirements were met.	No. <i>See</i> §63.11115 for general duty requirement.
63.6(e)(1)(ii)	Requirement to correct malfunctions ASAP	Owner or operator must correct malfunctions as soon as possible.	No.
§63.6(e)(2)	[Reserved]		
§63.6(e)(3)	Startup, Shutdown, and Malfunction (SSM) Plan	Requirement for SSM plan; content of SSM plan; actions during SSM	No.
§63.6(f)(1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM	No.
§63.6(f)(2)-(3)	Methods for Determining	Compliance based on performance test,	Yes.

		Compliance	operation and maintenance plans, records, inspection	
	§63.6(g)(1)-(3)	Alternative Standard	Procedures for getting an alternative standard	Yes.
	§63.6(h)(1)	Compliance with Opacity/Visible Emission (VE) Standards	You must comply with opacity/VE standards at all times except during SSM	No.
	§63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards	If standard does not State test method, use EPA Method 9 for opacity in appendix A of part 60 of this chapter and EPA Method 22 for VE in appendix A of part 60 of this chapter	No.
	§63.6(h)(2)(ii)	[Reserved]		
	§63.6(h)(2)(iii)	Using Previous Tests To Demonstrate Compliance With Opacity/VE Standards	Criteria for when previous opacity/VE testing can be used to show compliance with this subpart	No.
	§63.6(h)(3)	[Reserved]		
	§63.6(h)(4)	Notification of Opacity/VE Observation Date	Must notify Administrator of anticipated date of observation	No.
	§63.6(h)(5)(i), (iii)-(v)	Conducting Opacity/VE Observations	Dates and schedule for conducting opacity/VE observations	No.
	§63.6(h)(5)(ii)	Opacity Test Duration and Averaging Times	Must have at least 3 hours of observation with 30 6-minute averages	No.
	§63.6(h)(6)	Records of Conditions During Opacity/VE Observations	Must keep records available and allow Administrator to inspect	No.
	§63.6(h)(7)(i)	Report Continuous Opacity Monitoring System (COMS) Monitoring Data From Performance Test	Must submit COMS data with other performance test data	No.
	§63.6(h)(7)(ii)	Using COMS Instead of EPA Method 9	Can submit COMS data instead of EPA Method 9 results even if rule requires EPA Method 9 in appendix A of part 60 of this chapter, but must notify Administrator before performance test	No.
	§63.6(h)(7)(iii)	Averaging Time for COMS During Performance Test	To determine compliance, must reduce COMS data to 6-minute averages	No.
	§63.6(h)(7)(iv)	COMS Requirements	Owner/operator must demonstrate that COMS performance evaluations are conducted according to §63.8(e); COMS are properly maintained and operated according to §63.8(c) and data quality as §63.8(d)	No.
	§63.6(h)(7)(v)	Determining Compliance with Opacity/VE Standards	COMS is probable but not conclusive evidence of compliance with opacity standard, even if EPA Method 9 observation shows otherwise. Requirements for COMS to be probable evidence-proper maintenance, meeting	No.

			Performance Specification 1 in appendix B of part 60 of this chapter, and data have not been altered	
	§63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Administrator will use all COMS, EPA Method 9 (in appendix A of part 60 of this chapter), and EPA Method 22 (in appendix A of part 60 of this chapter) results, as well as information about operation and maintenance to determine compliance	No.
	§63.6(h)(9)	Adjusted Opacity Standard	Procedures for Administrator to adjust an opacity standard	No.
	§63.6(i)(1)-(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
	§63.6(j)	Presidential Compliance Exemption	President may exempt any source from requirement to comply with this subpart	Yes.
	§63.7(a)(2)	Performance Test Dates	Dates for conducting initial performance testing; must conduct 180 days after compliance date	Yes.
	§63.7(a)(3)	CAA Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes.
	§63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.
	§63.7(b)(2)	Notification of Re-scheduling	If have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay	Yes.
	§63.7(c)	Quality Assurance (QA)/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
	§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
	63.7(e)(1)	Conditions for Conducting Performance Tests	Performance test must be conducted under representative conditions	No, §63.11120(c) specifies conditions for conducting performance tests.
	§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to this subpart and EPA test methods unless Administrator approves alternative	Yes.
	§63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional	Yes.

			test run can be used	
	§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an intermediate or major change, or alternative to a test method	Yes.
	§63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status; keep data for 5 years	Yes.
	§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
	§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes.
	§63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes.
	§63.8(a)(3)	[Reserved]		
	§63.8(a)(4)	Monitoring of Flares	Monitoring requirements for flares in §63.11 apply	Yes.
	§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
	§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	No.
	§63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	No.
	§63.8(c)(1)(i)-(iii)	Operation and Maintenance of Continuous Monitoring Systems (CMS)	Must maintain and operate each CMS as specified in §63.6(e)(1); must keep parts for routine repairs readily available; must develop a written SSM plan for CMS, as specified in §63.6(e)(3)	No.
	§63.8(c)(2)-(8)	CMS Requirements	Must install to get representative emission or parameter measurements; must verify operational status before or at performance test	No.
	§63.8(d)	CMS Quality Control	Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years; keep old versions for 5 years after	No.

			revisions	
	§63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	No.
	§63.8(f)(1)-(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	No.
	§63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for continuous emissions monitoring system (CEMS)	No.
	§63.8(g)	Data Reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1 hour averages computed over at least 4 equally spaced data points; data that cannot be used in average	No.
	§63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
	§63.9(b)(1)-(2), (4)-(5)	Initial Notifications	Submit notification within 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each	Yes.
	§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate	Yes.
	§63.9(d)	Notification of Special Compliance Requirements for New Sources	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
	§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes.
	§63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No.
	§63.9(g)	Additional Notifications when Using CMS	Notification of performance evaluation; notification about use of COMS data; notification that exceeded criterion for relative accuracy alternative	Yes, however, there are no opacity standards.
	§63.9(h)(1)-(6)	Notification of Compliance Status	Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority	Yes, however, there are no opacity standards.
	§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change when notifications must be submitted	Yes.
	§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes.

	§63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source	Yes.
	§63.10(b)(1)	Recordkeeping/Reporting	General requirements; keep all records readily available; keep for 5 years	Yes.
	§63.10(b)(2)(i)	Records related to SSM	Recordkeeping of occurrence and duration of startups and shutdowns	No.
	§63.10(b)(2)(ii)	Records related to SSM	Recordkeeping of malfunctions	No. <i>See</i> §63.11125(d) for recordkeeping of (1) occurrence and duration and (2) actions taken during malfunction.
	§63.10(b)(2)(iii)	Maintenance records	Recordkeeping of maintenance on air pollution control and monitoring equipment	Yes.
	§63.10(b)(2)(iv)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
	§63.10(b)(2)(v)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
	§63.10(b)(2)(vi)-(xi)	CMS Records	Malfunctions, inoperative, out-of-control periods	No.
	§63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
	§63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	Yes.
	§63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status	Yes.
	§63.10(b)(3)	Records	Applicability determinations	Yes.
	§63.10(c)	Records	Additional records for CMS	No.
	§63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes.
	§63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.
	§63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	No.
	§63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes.
	§63.10(d)(5)	SSM Reports	Contents and submission	No. <i>See</i> §63.11126(b) for malfunction reporting requirements.

	§63.10(e)(1)-(2)	Additional CMS Reports	Must report results for each CEMS on a unit; written copy of CMS performance evaluation; two-three copies of COMS performance evaluation	No.
	§63.10(e)(3)(i)-(iii)	Reports	Schedule for reporting excess emissions	No.
	§63.10(e)(3)(iv)-(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c)(7)-(8) and 63.10(c)(5)-(13)	No.
	§63.10(e)(3)(iv)-(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c)(7)-(8) and 63.10(c)(5)-(13)	No, §63.11130(K) specifies excess emission events for this subpart.
	§63.10(e)(3)(vi)-(viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for CMS; requires all of the information in §§63.10(c)(5)-(13) and 63.8(c)(7)-(8)	No.
	§63.10(e)(4)	Reporting COMS Data	Must submit COMS data with performance test data	No.
	§63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.
	§63.11(b)	Flares	Requirements for flares	No.
	§63.12	Delegation	State authority to enforce standards	Yes.
	§63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes.
	§63.14	Incorporations by Reference	Test methods incorporated by reference	Yes.
	§63.15	Availability of Information	Public and confidential information	Yes.

Appendix A

PSD Conditions - Permit #78-02

Special Conditions - Boric Acid Plant

A. Certification

U. S. Borax shall notify the EPA in writing of compliance with Special Conditions C, D, E and F below, and shall make such notification within fifteen (15) days of such compliance. This letter must be signed by a responsible representative of U. S. Borax.

B. Fuel Usage and Sulfur Content

U. S. Borax shall consume no more than 840 barrels per day of oil on an annual average basis for the following equipment:

One 150,000 lbs/hr steam boiler (boiler #7) at proposed boric acid plant.

The sulfur content of the fuel shall be no greater than 0.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D1551-64, or equivalent methods approved by the EPA. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the Eastern Kern Air Pollution Control District, the California Air Resources Board, and the EPA.

C. Impact Mill Scrubber

U. S. Borax shall have installed an operable wet venturi scrubber on the boric acid plant impact mill, prior to startup of the plant to remove particulate matter from the secondary crushing and screening operation. Throughout the screening and crushing operation, all borax ore shall be completely enclosed within the process machinery and shall not come into contact with the atmosphere. Air exiting the enclosed area shall be ducted through the scrubber before release to the atmosphere. The scrubber shall have a particulate collection efficiency of at least 99.5%.

As an alternative to the scrubbing condition above, and subject to notification to and approval by the EPA, U. S. Borax shall install an operable fabric filter (baghouse) on the impact mill, having a particulate collection efficiency of at least 99.5%. The baghouse shall be installed before plant startup and all exit air from the impact mill shall be ducted through it before being released to the atmosphere.

D. Dryers Scrubber

U. S. Borax shall have installed operable wet venturi scrubbers on three product dryers, prior to startup of the boric acid plant. All exhaust gases from the dryers shall be ducted through the scrubbers before release to the atmosphere. The scrubbers shall have a particulate collection efficiency of at least 99%.

As an alternative to the scrubbing condition above, and subject to notification to and approval by the EPA, U. S. Borax shall install operable fabric filters (baghouses) on the three product dryers, having a particulate collection efficiency of at least 99%. The baghouses shall be installed prior to

plant startup and all exhaust gases from the dryers shall be ducted through the baghouses before being released to the atmosphere.

1. Performance Tests

- a. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial startup of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, U. S. Borax shall conduct performance tests for Particulates and furnish the Eastern Kern APCD and the EPA a written report of the results of such tests. The tests for Particulates shall be conducted on a semi-annual basis.
- b. The performance tests shall be conducted for the equipment designated below:
 - (1) The scrubber (or baghouse) on the plant impact mill.
 - (2) The scrubbers (or baghouses) on the three product dryers.Performance tests for the emissions of Particulates shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46, of the Standards of Performance for New Sources, on the equipment named above. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA.

2. Emission Limits for Particulates

On and after the date of startup of the boric acid plant, U. S. Borax shall not discharge or cause the discharge into the atmosphere Particulates in excess of:

- a. From impact mill - .003 lbs per ton of ore feed to the mill.
- b. From dryers - .067 lbs per ton of ore feed to the boric acid plant.

E. Product Handling Fabric Filters

U. S Borax shall have installed operable fabric filters at the boric acid product handling and storage section of the plant prior to plant startup. Throughout the product handling and storage operations which include product conveying, product screening and grinding, day bin storage, silo bulk storage, and bulk truck loading, all boric acid product shall be completely enclosed within the process machinery and shall not come into contact with the atmosphere. Air exiting the enclosed area shall be ducted through the fabric filters before release to the atmosphere. The filters shall have a particulate collection efficiency of at least 99.7%.

F. Bulk Rail Loadout Fabric Filters

U. S Borax shall have installed operable fabric filters (one baghouse) on the bulk rail loadout facilities prior to plant startup. During all loading, the boric acid product shall be enclosed within the loading machinery and shall not come into contact with the atmosphere. Air vented to the atmosphere from the enclosed area shall be ducted through the fabric filters before release to the atmosphere. The baghouse shall have a particulate collection efficiency of at least 99.7%.

1. Performance Tests

- a. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial startup of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, U. S. Borax shall conduct performance tests for Particulates and shall furnish the Eastern Kern APCD and the EPA a written report of the results of such tests. The tests for Particulates shall be conducted on a semi-annual basis.
- b. The performance tests shall be conducted for the equipment designated below:
 - (1) Fabric filters on product handling and storage area.
 - (2) Fabric filters on bulk rail loadout area.Performance tests for the emissions of Particulates shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46, of the Standards of Performance for New Sources, on the equipment named above. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA.

2. Emission Limits for Particulates

On and after the date of startup of the boric acid plant, U. S. Borax shall not discharge or cause the discharge into the atmosphere Particulates in excess of:

- a. From product handling and storage area - .035 lbs per ton of product.
- b. From bulk rail loadout area - 2.0 lbs per rail car loaded.

G. Fugitive Dust

At all points throughout the mine and plant facilities, water sprays shall be utilized to control fugitive particulate emissions whenever necessary to prevent visible emissions. This condition is in addition to controls specified in other conditions.

Agency Notification

All correspondence as required by this Approval to Construct/Modify shall be forwarded to:

- A. Director, Air Division (Attn: AIR-3)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105
- B. Chief, Stationary Source Division
California Air Resources Board
P. O. Box 2815
Sacramento, CA 95812
- C. Air Pollution Control Officer
Eastern Kern Air Pollution Control District
2700 M Street, Suite 302
Bakersfield, CA 93301

Amendment to U. S. Borax, June 14, 1978
Approval to Construct
(NSR 4-4-11, SE 78-02)

The June 14, 1978, Approval to Construct issued to U. S. Borax is hereby amended and takes effect the date of this letter.

Special Condition F.2. is amended to read as follows:

F.2. Emission Limits for Particulates

On and after the date of startup of the boric acid plant, U. S. Borax shall not discharge or cause the discharge into the atmosphere particulates in excess of:

- a. From product handling and storage area - 0.081 lbs per ton of product.
- b. From bulk rail loadout area - 2.0 lbs per rail car loaded.

All other permit conditions are unchanged and remain in effect.

PSD Conditions - Permit #79-01

Special Conditions - D.E. Silo

A. Certification

U. S. Borax shall notify the EPA in writing of compliance with Condition VIII.B., and shall make such notification within fifteen (15) days of compliance. This letter must be signed by a responsible representative of U. S. Borax.

B. Fabric Filter for Diatomaceous Earth Transfer

U. S. Borax shall install, operate, and maintain an operable baghouse on the diatomaceous earth pneumatic conveying system described in their application. Exhaust gases from this conveying system shall be ducted through the baghouse at all times during its operation.

C. Emission Limits for Particulate Matter

On and after the date of startup, U. S. Borax shall not cause the discharge of particulate matter from the baghouse designated in Condition VIII.B. in excess of 0.1 grains per cubic foot of exhaust gas.

Agency Notifications

All correspondence as required by this Approval to Construct/Modify shall be forwarded to:

- A. Director, Air Division (Attn: AIR-3)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105
- B. Chief, Stationary Source Division
California Air Resources Board
P. O. Box 2815
Sacramento, CA 95812
- C. Air Pollution Control Officer
Eastern Kern Air Pollution Control District
2700 M Street, Suite 302
Bakersfield, CA 93301

PSD Conditions - Permit #82-02 (Replaces #81-04)

Special Conditions - Cogeneration Plant

A. Certification

U. S. Borax shall notify the EPA (Attn: AIR-3) in writing of compliance with Special Condition E. below and shall make such notification with fifteen (15) days of such compliance. This letter must be signed by a responsible representative of U. S. Borax.

B. Fuel Usage and Sulfur Content

1. The 45 MW gas turbine shall consume no more than 4,150-gallons per hour of No. 2 fuel oil or 615,500 SCFH of natural gas.
2. The duct burner unit shall consume no more than 221.000 SCFM of natural gas.
3. The sulfur content of the fuel oil shall be no greater than 0.25 percent by weight as determined by ASTM Methods D-129 or D-1552, or the most current method promulgated by ASTM, or by equivalent methods approved by EPA.
4. The amount of fuel oil/gas consumed per hour by the turbine and the duct burner unit; and the sulfur content of the fuel oil consumed by the turbine shall be recorded in a permanent record and shall be available for periodic inspection by the Eastern Kern Air Pollution Control District, the California Air Resources Board, and the EPA.
5. When the gas turbine is in operation, the total heating value of the fuel consumed by the turbine, duct burner and Boilers 1 through 7 shall not exceed 1.11×10^9 BTU/hr.

C. Emission Limits

1. On and after the date of startup of the gas turbine/duct burner unit, U. S. Borax shall not discharge, or cause the discharge into the atmosphere from the heat recovery steam generator (HRSG) stack, pollutants in excess of the following specified limits:

<u>Pollutant</u>	<u>Maximum Emission Limit (lbs/hr)</u>
Particulate Matter	14.0
Carbon Monoxide	446.0
2. On and after the date of startup of the gas turbine/duct burner unit, U. S. Borax shall not discharge, or cause the discharge into the atmosphere from the HRSG stack nitrogen oxides in excess of the following limits:
 - a. Maximum emission limit: 268.2 pounds per hour
 - b. Average emission limit: 0.57 pounds per MMBTU
3. On and after the date of startup of the gas turbine, U. S. Borax shall not discharge, or cause the discharge into the atmosphere from the HRSG exhaust any gases which exhibit greater than 20 percent opacity.

D. Performance Tests

1. Within 60 days after achieving the maximum production rate of the gas turbine/duct burner unit, but no later than 180 days after initial startup (as defined in 40 CFR 60.2(o)) of the facility and at such times as may be specified by EPA, U. S. Borax shall conduct or cause to be conducted performance tests (as defined in 40 CFR 60.8) for NO_x, CO and particulate matter (PM) on the exhaust stack gases from the HRSG. U. S. Borax shall furnish the Eastern Kern Air Pollution Control District and the EPA (Attn: AIR-3) a written report of the results of such tests. All performance tests shall be conducted at the maximum operating capacity of the emissions unit being tested. The performance tests shall be conducted on at least an annual basis. Upon prior written request and supporting justification, EPA may waive a specific annual test and/or allow for testing to be done at less than the maximum operating capacity. Such requests must be submitted (Attn: AIR-3) no later than 60 days prior to the annual test date.
2. Performance tests for the emissions of NO_x, CO and PM shall be conducted and results reported in accordance with the test methods set forth in 40 CFR 60, Part 60.8 and Appendix A. The following test methods shall be used:
 - a. Performance tests for the emissions of NO_x shall be conducted using EPA Methods 1-4 and 7 procedures.
 - b. Performance tests for the emissions of CO shall be conducted using EPA Methods 1-4 and 10 procedures.
 - c. Performance tests for PM shall be conducted using EPA Methods 1-4 and 5 procedures.

At least 30 days prior to actual testing, U. S. Borax shall submit to the EPA (Attn: AIR-3) (1) a quality assurance project plan detailing methods and procedures to be used and (2) a quality assurance test plan. Such a plan shall conform to EPA document "Guidelines for Developing a Quality Assurance Project Plan," QAMS 005/80. A test plan or quality assurance plan that does not have EPA approval may be grounds to invalidate any test and require a retest. In lieu of the above mentioned test methods, equivalent methods may be used with prior approval from the EPA.

3. For performance test purposes, sampling ports, platforms, and access shall be provided by U. S. Borax on the turbine exhaust stack in accordance with 40 CFR 60.8(e).

E. Continuous Monitoring

1. NO_x and Opacity Continuous Monitoring

Prior to the date of startup and thereafter, U. S. Borax shall install, maintain and operate the following continuous monitoring system in the exhaust stack of the HRSG:

- a. A continuous monitoring system to measure stack gas NO_x concentration. The system shall meet EPA monitoring performance specifications (40 CFR 60.13 and 40 CFR 60, Appendix B, Performance Specification 2).

- b. A transmissometer system for continuous measurement of the opacity of stack emissions. The system shall meet EPA monitoring requirements performance specifications (40 CFR 60.13 and 40 CFR 60, Appendix B, Performance Specification 1).
 - c. A continuous monitoring system to measure stack gas volumetric flow rates. The system shall meet EPA monitoring requirements performance specifications (40 CFR Part 52, Appendix E).
2. U. S. Borax shall notify EPA (Attn: AIR-3) of the date upon which demonstration of the continuous monitoring systems performance commences (40 CFR 60.13(c)).
3. U. S. Borax shall submit a written report of all excess emissions to EPA (Attn: AIR-3) for every calendar quarter. The report shall include the following:
 - a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions.
 - b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the gas turbine. The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted shall also be reported.
 - c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - d. When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

Excess emissions shall be defined as:

- (1) Any consecutive three-hour period during which the average emissions of NO_x, as measured by the continuous monitoring system, exceeds the maximum emission limits set forth in IX.C.2. above.
- (2) Any consecutive 24-hour period during which the average emissions of NO_x, as measured by the continuous monitoring system, exceeds the average emission limit set forth in IX.C.2.
- (3) Any 6-minute average, as measured by the continuous monitoring system, which exceeds an opacity of 20 percent, except for one 6-minute period per hour of not more than 25 percent opacity.

4. U. S. Borax shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports and records.
5. Not less than 90 days prior to the date of startup, U. S. Borax shall submit to the EPA (Attn: AIR-3) a quality assurance project plan for the certification and operation of the continuous emission monitors. Such a plan shall conform to the EPA document "Guidelines for Developing a Quality Assurance Project Plan" (QAMS 005/80). Continuous emission monitoring may not begin until the quality assurance project plan has been approved by EPA Region 9.

F. By-Pass Record Keeping

U. S. Borax shall maintain a record of the date(s), time(s), and duration(s) of those periods when the exhaust stream of the gas turbine or the duct burner unit, is vented through the by-pass stack.

Agency Notifications

All correspondence as required by this Approval to Construct/Modify shall be forwarded to:

- A. Director, Air Division (Attn: AIR-3)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105
- B. Chief, Stationary Source Division
California Air Resources Board
P. O. Box 2815
Sacramento, CA 95812
- C. Air Pollution Control Officer
Eastern Kern Air Pollution Control District
2700 M Street, Suite 302
Bakersfield, CA 93301

Appendix B

Compliance Air Monitoring (CAM)

Emissions Unit Equipment No.	1004001	Primary Crusher A PCC-DC-100
Equipment Description	Primary Crusher And Stacking Operation	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 1270
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 1.27
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% Opacity or Ringelmann ¼	

Emissions Unit Equipment No.	1004001	Primary Crusher B PCC-DC-101
Equipment Description	Primary Crusher And Stacking Operation	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2250
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2.25
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% Opacity or Ringelmann ¼	

Emissions Unit Equipment No.	1004002	DIS-DC-101
Equipment Description	Secondary Screening And Crushing	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 490
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 0.49
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 7% opacity.	

Emissions Unit Equipment No.	1004002	DIS-DC-102
Equipment Description	Secondary Screening And Crushing	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 1620
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 1.62
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 7% opacity.	

Emissions Unit Equipment No.	1004002	DIS-DC-005 (200005)
Equipment Description	Secondary Screening And Crushing	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 5260
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 5.26
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 7% opacity.	

Emissions Unit Equipment No.	1004003	234-DC-096 (Scrubber) Out of Service
Equipment Description	Dryer For 5 Mol, Penta, PBPG	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 10070
Control Equipment	Venturi Scrubber	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 10.07
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 7% opacity.	

Emissions Unit Equipment No.	1004005	234-DC-059 (Scrubber)
Equipment Description	5 Mol Rotary Dryer and Storage Operations	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 1620
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 1.62
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% Opacity or Ringelmann ¼	

Emissions Unit Equipment No.	1004005	BLK-DC-109
Equipment Description	5 Mol Rotary Dryer and Storage Operations	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 8820
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 8.82
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% Opacity or Ringelmann ¼	

Emissions Unit Equipment No.	1004005 and 1004205	234-DC-095
Equipment Description	5 Mol Rotary Dryer and Storage Operations	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 5780
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 5.78
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% Opacity or Ringelmann ¼	

Emissions Unit Equipment No.	1004005	234-DC-500
Equipment Description	5 Mol Rotary Dryer and Storage Operations	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 1620
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 1.62
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% Opacity or Ringelmann ¼	

Emissions Unit Equipment No.	1004006	BLK-DC-085
Equipment Description	5 Mol Screening & Conveying	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 12090
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 12.09
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 7% opacity.	

Emissions Unit Equipment No.	1004006 & 1004053	BLK-DC-086
Equipment Description	5 Mol Screening & Conveying	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 8790
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 8.79
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 7% opacity.	

Emissions Unit Equipment No.	1004007 and 1004083	SHP-DC-118
Equipment Description	5 Mol High Speed Conveying	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 7660
Control Equipment	Fabric Collector	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 7.66
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 20% opacity.	

Emissions Unit Equipment No.	1004008 and 1004071	SHP-DC-119
Equipment Description	5 Mol Railcar Loadout	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 11540
Control Equipment	Fabric Collector	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 11.54
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 20% opacity.	

Emissions Unit Equipment No.	1004009	PPK-DC-500
Equipment Description	5/10 Mol Packing and Powder Mill Operations	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 1130
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 1.13
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% Opacity or Ringelmann ¼	

Emissions Unit Equipment No.	1004009	MIL-DC-021
Equipment Description	5/10 Mol Packing and Powder Mill Operations	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 505
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 0.505
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% Opacity or Ringelmann ¼	

Emissions Unit Equipment No.	1004010, '019 and '032	ABX-DC-163
Equipment Description	5 Mol Furnace Feed	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2670
Control Equipment	Fabric Collector	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2.67
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 20% opacity.	

Emissions Unit Equipment No.	1004012, '013, '014, '015 and '016	234-DC-301
Equipment Description	10 Mol Dryers	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 4160
Control Equipment	Fabric Collector	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 4.16
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 20% opacity.	

Emissions Unit Equipment No.	1004016	234-DC-302
Equipment Description	10 Mol Crushing/Screening Operation	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 490
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 0.49
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 20% opacity.	

Emissions Unit Equipment No.	1004016	234-DC-303
Equipment Description	10 Mol Crushing/Screening Operation	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 490
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 0.49
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 20% opacity.	

Emissions Unit Equipment No.	1004016	234-DC-304
Equipment Description	10 Mol Crushing/Screening Operation	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 490
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 0.49
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 20% opacity.	

Emissions Unit Equipment No.	1004016	234-DC-305
Equipment Description	10 Mol Crushing/Screening Operation	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 490
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 0.49
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 20% opacity.	

Emissions Unit Equipment No.	1004016	234-DC-306
Equipment Description	10 Mol Crushing/Screening Operation	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 490
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 0.49
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 20% opacity.	

Emissions Unit Equipment No.	1004016	TMS-DC-158
Equipment Description	10 Mol Crushing/Screening Operation	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 4160
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 4.16
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 20% opacity.	

Emissions Unit Equipment No.	1004017	TMS-DC-081
Equipment Description	10 Mol Railcar Loadout	
Uncontrolled Emissions	Pollutant	Potential to Emit (tons/year)
	PM ₁₀	2100
Control Equipment	Fabric Collector	
Controlled Emissions	Pollutant	Potential to Emit (tons/year)
	PM ₁₀	2.10
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 20% opacity.	

Emissions Unit Equipment No.	1004018	PPK-DC-100
Equipment Description	10 Mol Packing	
Uncontrolled Emissions	Pollutant	Potential to Emit (tons/year)
	PM ₁₀	1130
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant	Potential to Emit (tons/year)
	PM ₁₀	1.13
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% opacity.	

Emissions Unit Equipment No.	1004018	PPK-DC-162
Equipment Description	10 Mol Packing	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 1130
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 1.13
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% opacity.	

Emissions Unit Equipment No.	1004027	ABX-DC-169
Equipment Description	Anhydrous Borax (ABX) Line 7 Fusing	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 1130
Control Equipment	Fabric Collector and Scrubber	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 1.13
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 20% opacity.	

Emissions Unit Equipment No.	1004027	Scrubber 200027
Equipment Description	Anhydrous Borax (ABX) Line 7 Fusing	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 12710
Control Equipment	Fabric Collector and Scrubber	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 12.71
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 20% opacity.	

Emissions Unit Equipment No.	1004028	ABX-DC-083
Equipment Description	ABX Line 7 cooling, milling, screening	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2455
Control Equipment	Fabric Collector and Scrubber	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2.455
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 7% opacity.	

Emissions Unit Equipment No.	1004028	ABX-DC-170
Equipment Description	ABX Line 7 cooling, milling, screening	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2455
Control Equipment	Fabric Collector and Scrubber	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2.45
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 7% opacity.	

Emissions Unit Equipment No.	1004029 and 1004110	BLK-DC-200
Equipment Description	ABX Screening/Loadout West and Upper East	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 10570
Control Equipment	Fabric Collector	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 10.57
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% Opacity or Ringelmann ¼	

Emissions Unit Equipment No.	1004030 and 1004110	BLK-DC-201
Equipment Description	ABX Screening/Loadout Lower East	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 9440
Control Equipment	Fabric Collector	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 9.44
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% opacity.	

Emissions Unit Equipment No.	1004031 and 1004048	PPK-DC-172
Equipment Description	ABX Packing	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 640
Control Equipment	Fabric Collector	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 0.64
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 7% opacity.	

Emissions Unit Equipment No.	1004032	ABA-DC-048 (ABA-DC-142)
Equipment Description	Fusing Plant(s) and Anhydrous Boric Acid Plant	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 220
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 0.22
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 10% opacity or Ringelmann ½.	

Emissions Unit Equipment No.	1004032	ABA-DC-056 - Scrubber
Equipment Description	Fusing Plant(s) and Anhydrous Boric Acid Plant	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 26940
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 26.94
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 7% opacity.	

Emissions Unit Equipment No.	1004033	ABA-DC-051
Equipment Description	Fusing Plant(s) and Anhydrous Boric Acid Plant	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 5
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) .005
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 7% opacity.	

Emissions Unit Equipment No.	1004033	ABA-DC-053
Equipment Description	Fusing Plant(s) and Anhydrous Boric Acid Plant	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 330
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) .33
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 7% opacity.	

Emissions Unit Equipment No.	1004033	ABA-DC-062
Equipment Description	Fusing Plant(s) and Anhydrous Boric Acid Plant	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 110
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) .11
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 7% opacity.	

Emissions Unit Equipment No.	1004049	DIS-DC-067
Equipment Description	Soda Ash Receiving/Storage/Handling	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 640
Control Equipment	Fabric Collector	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 0.64
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 20% opacity.	

Emissions Unit Equipment No.	1004050	234-DC-112
Equipment Description	5 Mol Fines Receiving/Storage/Handling	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 3060
Control Equipment	Fabric Collector	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 3.06
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% opacity.	

Emissions Unit Equipment No.	1004059 & USEPA Permit PSD SE 78-02	BAP-DC-135 (Scrubber)
Equipment Description	Boric Acid Secondary Crusher & Ore Feed System	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 5650
Control Equipment	Fabric Collector and Scrubber	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 5.65
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% Opacity or Ringelmann ¼.	

Emissions Unit Equipment No.	1004059 & USEPA Permit PSD SE 78-02	BAP-DC-143
Equipment Description	Boric Acid Secondary Crusher & Ore Feed System	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2410
Control Equipment	Fabric Collector and Scrubber	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2.44
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 10% Opacity or Ringelmann ½.	

Emissions Unit Equipment No.	1004060 & USEPA Permit PSD SE 78-02	BAP-DC-129
Equipment Description	Boric Acid #1 Drying Operation	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 19500
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 19.5
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 10% opacity.	

Emissions Unit Equipment No.	1004061 & USEPA Permit PSD SE 78-02	BAP-DC-130
Equipment Description	Boric Acid #2 Drying Operation	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 19500
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 19.5
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 10% opacity.	

Emissions Unit Equipment No.	1004063, '65 & USEPA Permit PSD SE 78-02	BAP-DC-122 (DC-1)
Equipment Description	Boric Acid Packing, Conveying to Railcar Loadout, and Bulk Loadout Operation (Trucks & Railcars)	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 5450
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 5.45
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 10% opacity.	

Emissions Unit Equipment No.	1004062 & USEPA Permit PSD SE 78-02	BAP-DC-131
Equipment Description	Boric Acid #3 Drying Operation	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 19500
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 19.5
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 10% opacity.	

Emissions Unit Equipment No.	1004064, '67 & USEPA Permit PSD SE 78-02	BAS-DC-124 (DC-3)
Equipment Description	Boric Acid Packing, Conveying to Railcar Loadout, and Bulk Loadout Operation (Trucks & Railcars)	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 7910
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 7.91
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 10% opacity.	

Emissions Unit Equipment No.	1004064, 63 & USEPA Permit PSD SE 78-02	BAP-DC-123 (DC-2)
Equipment Description	Boric Acid Packing, Conveying to Railcar Loadout, and Bulk Loadout Operation (Trucks & Railcars)	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 3200
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 3.2
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 10% opacity.	

Emissions Unit Equipment No.	1004066 & USEPA Permit PSD SE 78-02	BAS-DC-127 (DC-6)
Equipment Description	Boric Acid Packing, Conveying to Railcar Loadout, and Bulk Loadout Operation (Trucks & Railcars)	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 11960
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 11.96
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 20% opacity or Ringelmann No. 1	

Emissions Unit Equipment No.	1004063, 66, '68 & USEPA Permit PSD SE 78-02	BAS-DC-125 (DC-4)
Equipment Description	Boric Acid Packing, Conveying to Railcar Loadout, and Bulk Loadout Operation (Trucks & Railcars)	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 6000
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 6.0
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall not exceed 10% opacity or Ringelmann ½.	

Emissions Unit Equipment No.	1004067 & USEPA Permit PSD SE 78-02	BAS-DC-168 (DC-7)
Equipment Description	Boric Acid Packing, Conveying to Railcar Loadout, and Bulk Loadout Operation (Trucks & Railcars)	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 630
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) .63
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 10% Opacity or Ringelmann ½.	

Emissions Unit Equipment No.	1004068 & USEPA Permit PSD SE 78-02	SHP-DC-701 (DC-8)
Equipment Description	Boric Acid Packing, Conveying to Railcar Loadout, and Bulk Loadout Operation (Trucks & Railcars)	
Uncontrolled Emissions	Pollutant	Potential to Emit (tons/year)
	PM ₁₀	8450
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant	Potential to Emit (tons/year)
	PM ₁₀	8.45
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 10% opacity or Ringelmann ½.	

Emissions Unit Equipment No.	1004073 & USEPA Permit PSD SE 78-02	BAP-DC-132
Equipment Description	Diatomaceous Earth Reclamation and Storage Operation	
Uncontrolled Emissions	Pollutant	Potential to Emit (tons/year)
	PM ₁₀	37230
Control Equipment	Fabric Collector	
Controlled Emissions	Pollutant	Potential to Emit (tons/year)
	PM ₁₀	37.23
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 20% opacity.	

Emissions Unit Equipment No.	1004085	BAS-DC-700
Equipment Description	Bulk Container Pneumatic Loading Operation	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2100
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2.10
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	There shall be no visible emissions.	

Emissions Unit Equipment No.	1004182	STK-DC-011 (DC-5)
Equipment Description	Bulk Store Facility Reclamation System (Domes #1 West and Dome #2 East)	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 301
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 0.301
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 7% opacity.	

Emissions Unit Equipment No.	1004183	STK-DC-014 (DC-6)
Equipment Description	Bulk Store Facility Reclamation System (Domes #1 West and Dome #2 East)	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 301
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 0.301
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 7% opacity.	

Emissions Unit Equipment No.	1004182 and 1004183	STK-DC-001 (DC-2)
Equipment Description	Bulk Store Facility Reclamation System (Domes #1 West and Dome #2 East)	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2350
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2.35
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 7% opacity.	

Emissions Unit Equipment No.	1004182 and 1004183	STK-DC-009
Equipment Description	Bulk Store Facility Reclamation System (Domes #1 West and Dome #2 East)	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 569
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 0.569
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 7% opacity.	

Emissions Unit Equipment No.	1004182 and 1004183	STK-DC-010 (DC-4)
Equipment Description	Bulk Store Facility Reclamation System (Domes #1 West and Dome #2 East)	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 350
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 0.35
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions shall be less than 7% opacity.	

Emissions Unit Equipment No.	1004222	BAP-DC-136
Equipment Description	Boric Acid #4 Drying Operation	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 750
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 0.75
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% Opacity or Ringelmann ¼	

Emissions Unit Equipment No.	1004222	BAP-SB-137
Equipment Description	Boric Acid #4 Drying Operation	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 750
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 0.75
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% Opacity or Ringelmann ¼	

Emissions Unit Equipment No.	1004223	GRB-DC-001
Equipment Description	Granubor II Silo #1 and Bucket Elevator	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2250
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2.25
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% Opacity or Ringelmann ¼	

Emissions Unit Equipment No.	1004267	DIS-DC-020
Equipment Description	Stand-by Secondary Crushing Unit	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 250
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 0.25
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% Opacity or Ringelmann ¼	

Emissions Unit Equipment No.	1004267	DIS-DC-004
Equipment Description	Stand-by Secondary Crushing Unit	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2780
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 2.78
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% Opacity or Ringelmann ¼	

Emissions Unit Equipment No.	1004267	DIS-DC-003
Equipment Description	Stand-by Secondary Crushing Unit	
Uncontrolled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 1080
Control Equipment	Fabric Collectors	
Controlled Emissions	Pollutant PM ₁₀	Potential to Emit (tons/year) 1.08
Monitoring Procedures	Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.	
Monitoring Ranges	Visible Emissions not to exceed 5% Opacity or Ringelmann ¼	

Appendix C

Greenhouse Gas Facility Wide Reporting

Greenhouse Gases:

Carbon dioxide (CO₂),

Nitrous oxide (N₂O),

Methane (CH₄),

Hydrofluorocarbons (HFCs),

Perfluorocarbons (PFCs), and

Sulfur Hexafluoride (SF₆).

Reported for the year 2024

GHG EMISSIONS (tons per year)							
Pollutants:	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	Total
Emissions (tpy):	382,434.3	7.03	0.703	N/A	N/A	0.0029	
*GWP:	1	21	310	**	**	23,900	
CO ₂ e (tpy):	382,434.3	180.33	214.95	N/A	N/A	0	382,829.58

GHGs in table above were reported as CO₂e for facility-wide Actual Emissions for year 2024.

*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).

** GWP varies based on each pollutant.