MAJOR SOURCE
PERMIT TO OPERATE

Permittee: U. S. Borax, Inc.

Location: 14486 Borax Road
Boron, California 93516-2000

Permit No: 1004-V-2000

Issuance Date: March 29, 2011

Expiration Date: March 29, 2016

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:

Glen E. Stephens, P.E.
Air Pollution Control Officer
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General Permit Conditions

List of Insignificant Air Pollutant Emitting Equipment

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<td>064</td>
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## Federal Regulations

40 CFR Part 60
- 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

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## Federal Regulations

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**Subpart AAAAA**  Municipal Solid Waste Landfills  
**Subpart ZZZZZ**  Stationary Reciprocating Internal Combustion Engines  
**Subpart CCCCCC**  Gasoline Dispensing Facilities

## Appendices

**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:

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<th>Federally Enforceable Conditions</th>
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<tr>
<td>1. <strong>Inspections</strong></td>
<td>Reg. I, Rule 107</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>2. <strong>Stack Monitoring</strong></td>
<td>Reg. I, Rule 108</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>3. <strong>Source Sampling</strong></td>
<td>Reg. I, Rule 108.1</td>
</tr>
<tr>
<td>Upon the request of the Control Officer and as directed by him the owner of any source operation which emits or may emit air contaminants, for which emission limits have been established, shall provide the necessary and proper facilities for source sampling. The applicable test method, if not specified in the rule, shall be conducted in accordance with Title 40 CFR, Subpart 60, Appendix A - Reference Methods, except particulate matter (PM$_{10}$) 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.</td>
<td></td>
</tr>
<tr>
<td>4. <strong>Equipment Breakdown</strong></td>
<td>Reg. I, Rule 111</td>
</tr>
<tr>
<td>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.</td>
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<tr>
<td>Federally Enforceable Conditions</td>
<td>Reg/Rule</td>
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</tr>
<tr>
<td><strong>5. Severability</strong></td>
<td>Reg. I, Rule 114</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>6. Applicability of Federally Enforceable Conditions</strong></td>
<td>Reg. II, Rule 201.1</td>
</tr>
<tr>
<td>Federally Enforceable Conditions <strong>do not apply</strong> to the following permit sections: Equipment Descriptions, and any Design Conditions, Operational Conditions, Special Conditions, or Compliance Testing Requirements designated as District only. Federally Enforceable Conditions <strong>shall apply</strong> to Design Conditions, Operational Conditions, Special Conditions, Compliance Testing Requirements, and Emission Limits except as noted above.</td>
<td></td>
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<tr>
<td><strong>7. Compliance with Permit Conditions</strong></td>
<td>Reg. II, Rule 201.1</td>
</tr>
<tr>
<td>A. U.S. Borax shall comply with all permit conditions;</td>
<td></td>
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<tr>
<td>B. Permit does not convey any property rights or any exclusive privilege;</td>
<td></td>
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<tr>
<td>C. Non-compliance with any permit condition shall be grounds for permit termination, revocation and reissuance, modification, enforcement action or denial of permit renewal;</td>
<td></td>
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<tr>
<td>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;</td>
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<tr>
<td>E. Pending permit action or notification of anticipated non-compliance does not stay any permit condition; and</td>
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<tr>
<td>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.</td>
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<tr>
<td>Federally Enforceable Conditions</td>
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<td><strong>8. Permit Life</strong></td>
<td>Reg. II, Rule 201.1</td>
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<tr>
<td>The life of this permit shall be five years from the date of issuance.</td>
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<tr>
<td><strong>9. Administrative Permit Amendment and Minor Permit Modification</strong></td>
<td>Reg. II, Rule 201.1</td>
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<tr>
<td>Administrative Permit Amendment and Minor Permit Modification are those actions taken by the District as defined in Rule 201.1.</td>
<td></td>
</tr>
<tr>
<td>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;</td>
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<tr>
<td>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:</td>
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<tr>
<td>1) An emergency occurred;</td>
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<tr>
<td>2) The permittee can identify the cause(s) of the emergency;</td>
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<tr>
<td>3) The facility was being properly operated at the time of the emergency;</td>
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<tr>
<td>4) All steps were taken to minimize the emissions resulting from the emergency; and</td>
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<tr>
<td>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;</td>
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<tr>
<td>C. In any enforcement proceeding, the permittee has the burden of proof for establishing that an emergency occurred.</td>
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### Federally Enforceable Conditions

#### 11. Record Keeping

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.

#### 12. Referencing of District and Applicable Requirements

Pursuant to Rule 201.1.VII.C. District hereby references the following documents which are clearly identified and available to the District and to the public:

A. Plant modernization project; and

B. Each Authority to Construct file for new equipment and each Authority to Construct file to modify existing equipment.

These files contain title, document number, applicant, and date received. Also included in these files are rule citations, engineering evaluations, and final documents all related to the existing permit conditions and emissions limits set forth in this permit.
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<th>Federally Enforceable Conditions</th>
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<td><strong>13. Reporting</strong></td>
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<tr>
<td>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;</td>
<td>Reg. II, Rule 201.1</td>
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<tr>
<td>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;</td>
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<tr>
<td>C. All reports of non-conformance with permit requirements shall include probable cause of non-conformance and any preventative or corrective action taken;</td>
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<tr>
<td>D. Progress report shall be made on a compliance schedule at least semi-annually and including:</td>
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<tr>
<td>1) Date when compliance will be achieved,</td>
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<tr>
<td>2) Explanation of why compliance was not, or will not be achieved by the scheduled date, and</td>
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<tr>
<td>3) Log of any preventative or corrective action taken; and</td>
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<tr>
<td>E. Each monitoring report shall be accompanied by a written statement from the responsible official certifying the truth, accuracy, and completeness of the report.</td>
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<tr>
<td><strong>14. Right of Entry</strong></td>
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<tr>
<td>U.S. Borax shall allow entry of District, CARB, or U.S. EPA officials for purpose of inspection and sampling, including:</td>
<td>Reg. II, Rule 201.1</td>
</tr>
<tr>
<td>A. Inspection of the stationary source, including equipment, work practices, operations, and emission-related activity;</td>
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<tr>
<td>B. Inspection and duplication of records required by the permit to operate; and</td>
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<tr>
<td>C. Source sampling or other monitoring activities.</td>
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<td><strong>15. Periodic Monitoring</strong></td>
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<td><strong>Non-Point</strong></td>
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<tr>
<td>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.</td>
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<tr>
<td>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.</td>
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<tr>
<td><strong>Point</strong></td>
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<tr>
<td>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:</td>
<td></td>
</tr>
<tr>
<td>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:</td>
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</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>Reg. II, Rule 201.1</td>
<td></td>
</tr>
</tbody>
</table>
### Federally Enforceable Conditions

<table>
<thead>
<tr>
<th>16.</th>
<th><strong>Additional Monitoring</strong></th>
<th>Reg/Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
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</tr>
<tr>
<td>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.</td>
<td>Reg. II, Rule 201.1</td>
<td></td>
</tr>
<tr>
<td>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.</td>
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</tr>
<tr>
<td>Record keeping provisions associated with all monitoring requirements shall include the following information:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Identification of stack or emission point being monitored;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Operational conditions at the time of monitoring;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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</td>
<td></td>
<td></td>
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<tr>
<td>D. Where corrective action is triggered, description of the corrective action and the date, time and results of any corrective action.</td>
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</tr>
</tbody>
</table>

**Scrubbers:** Weekly records of pressure drop and scrubber liquid flowrate shall be kept.

### Testing

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)
16. **Federally Enforceable Conditions**

<table>
<thead>
<tr>
<th>Reg/Rule</th>
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</thead>
<tbody>
<tr>
<td>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 Method 5 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 #SE78-02 and District Rule 210.1)</td>
</tr>
</tbody>
</table>

17. **Monitoring, Testing, Record Keeping Requirements** (GDF Phase I)

<table>
<thead>
<tr>
<th>Reg. II, Rule 201.1</th>
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</thead>
<tbody>
<tr>
<td>Applies to EU 089.</td>
</tr>
</tbody>
</table>

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-323-82 at storage temperature; and

C. The test method to determine vapor tightness of delivery vessels shall be EPA Method 27.

18. **Monitoring, Testing, Record Keeping Requirements** (GDF Phase II)

<table>
<thead>
<tr>
<th>Reg. II, Rule 201.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applies to EU 089.</td>
</tr>
</tbody>
</table>

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”.

<table>
<thead>
<tr>
<th>Reg. IV, Rule 412</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>Federally Enforceable Conditions</td>
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<td>----------------------------------</td>
</tr>
<tr>
<td>**19. ** <strong>Conditional Approval</strong></td>
</tr>
</tbody>
</table>

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.
<table>
<thead>
<tr>
<th>Federally Enforceable Conditions</th>
<th>Reg/Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>20. Standards for Authority to Construct</strong></td>
<td>Reg. II, Rule 210.1 Section IV. D.3</td>
</tr>
</tbody>
</table>

A. U.S. Borax 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.
<table>
<thead>
<tr>
<th>Federally Enforceable Conditions</th>
<th>Reg/Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. <strong>Prevention of Significant Deterioration (PSD)</strong></td>
<td>Reg. II, Rule 210.4</td>
</tr>
<tr>
<td>U.S. Borax may be subject to District Rule 210.4, Prevention of Significant Deterioration (PSD) if it undergoes major modification(s).</td>
<td></td>
</tr>
<tr>
<td>22. <strong>Permit Fees</strong></td>
<td>Reg. III, Rule 301</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>Payment of Supplemental Fee</strong></td>
<td>Rule 201.1 Section VIII. B.</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>23. <strong>Greenhouse Gas Fee</strong></td>
<td>Reg. III, Rule 301.4</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>24. <strong>Visible Emissions</strong></td>
<td>Reg. IV, Rule 401</td>
</tr>
<tr>
<td>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:</td>
<td></td>
</tr>
<tr>
<td>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</td>
<td></td>
</tr>
<tr>
<td>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.</td>
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<tr>
<td>Federally Enforceable Conditions</td>
<td>Reg/Rule</td>
</tr>
<tr>
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</tr>
<tr>
<td><strong>25. Particulate Matter Concentration - Desert Basin</strong></td>
<td>Reg. IV, Rule 404.1</td>
</tr>
<tr>
<td>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 0.2 grains per cubic foot of gas at standard conditions.</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>26. Particulate Matter - Emission Rate</strong></td>
<td>Reg. IV, Rule 405</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>27. Sulfur Compounds</strong></td>
<td>Reg. IV, Rule 407</td>
</tr>
<tr>
<td>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).</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>29. Organic Solvents</strong></td>
<td>Reg. IV, Rule 410</td>
</tr>
<tr>
<td>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).</td>
<td></td>
</tr>
<tr>
<td>Federally Enforceable Conditions</td>
<td>Reg/Rule</td>
</tr>
<tr>
<td>----------------------------------</td>
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</tr>
<tr>
<td>30. <strong>Disposal and Evaporation of Solvents</strong></td>
<td>Reg. IV, Rule 410.2</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>31. <strong>Organic Solvent Degreasing Operation</strong></td>
<td>Reg. IV, Rule 410.3</td>
</tr>
<tr>
<td>A person shall not operate any organic solvent degreasing operation unless the equipment utilized complies with all applicable requirements of Rule 410.3.</td>
<td></td>
</tr>
<tr>
<td>32. <strong>Metal, Plastic, and Pleasure Craft Parts and Products Coating Operations</strong></td>
<td>Reg. IV, Rule 410.4</td>
</tr>
<tr>
<td>U.S. Borax may be subject to provisions of Rule 410.4 that apply to surface coating of metal parts or products, large appliances parts or products, metal furniture, and plastic parts or products including automotive, transportation, and business machine, and pleasure crafts, and to the cleaning, storage, and disposal of all organic solvents and waste solvent materials associated with such coating operations.</td>
<td></td>
</tr>
<tr>
<td>33. <strong>Motor Vehicle and Mobile Equipment Refinishing Operations</strong></td>
<td>Reg. IV, Rule 410.4A</td>
</tr>
<tr>
<td>U.S. Borax 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.</td>
<td></td>
</tr>
<tr>
<td>34. <strong>Storage of Organic Liquids</strong></td>
<td>Reg. IV, Rule 411</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>35. <strong>Gasoline Transfer into Stationary Storage Containers, Delivery Vessels and Bulk Plants</strong></td>
<td>Reg. IV, Rule 412</td>
</tr>
<tr>
<td>A person shall not transfer gasoline into storage or delivery vessels unless provisions are made to recover 95% of the displaced vapors.</td>
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<tr>
<td>Federally Enforceable Conditions</td>
<td>Reg/Rule</td>
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<td>----------------------------------</td>
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</tr>
<tr>
<td><strong>36. Transfer of Gasoline into Vehicle Fuel Tanks</strong></td>
<td>Reg. IV, Rule 412.1</td>
</tr>
<tr>
<td>No person shall transfer gasoline into vehicle fuel tanks unless CARB-Certified Phase II dispensing equipment is utilized and maintained in correct working order.</td>
<td></td>
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<tr>
<td><strong>37. Open Burning</strong></td>
<td>Reg. IV, Rule 416</td>
</tr>
<tr>
<td><strong>Applicability</strong></td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>Prohibition</strong></td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>38. Nuisance</strong></td>
<td>Reg. IV, Rule 419</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>39. Federal New Source Performance Standards (NSPS)</strong></td>
<td>Reg. IV, Rule 422</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
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<tr>
<td>Federally Enforceable Conditions</td>
<td>Reg/Rule</td>
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<tr>
<td>---------------------------------</td>
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<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>41. Cogeneration Gas Turbine Engines (Oxides of Nitrogen)</strong></td>
<td>Reg. IV, Rule 425</td>
</tr>
<tr>
<td>Provisions of this Rule shall apply to any cogeneration gas turbine engine with a rating equal to or greater than 10.0 megawatts (MW).</td>
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</tr>
<tr>
<td><strong>42. Boilers, Steam Generators, and Process Heaters (Oxides of Nitrogen)</strong></td>
<td>Reg. IV, Rule 425.2</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>43. Risk Management Plan</strong></td>
<td>40 CFR 68</td>
</tr>
<tr>
<td>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.</td>
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### Federally Enforceable Conditions

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<thead>
<tr>
<th>43.</th>
<th>Compliance Certification</th>
<th>40 CFR 70.5d</th>
</tr>
</thead>
<tbody>
<tr>
<td>The owner/operator shall comply with the following procedures for compliance certification:</td>
<td></td>
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</tr>
<tr>
<td>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;</td>
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<tr>
<td>B. Compliance certification period shall begin March 28 of each year and end March 27 of the following year;</td>
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<tr>
<td>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;</td>
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<tr>
<td>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</td>
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<tr>
<td>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.</td>
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</tbody>
</table>

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

<table>
<thead>
<tr>
<th>44.</th>
<th>Protection of Stratospheric Ozone</th>
<th>40 CFR 82</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
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<td></td>
</tr>
</tbody>
</table>

23
**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

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>001</td>
<td>Primary Crusher &amp; Ore Stacking Operation</td>
</tr>
</tbody>
</table>

**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. 40-hp Primary Crusher B Discharge Conveyor (PCC-BC-104);
- D. 75-hp Stacker Feed Conveyor (PCC-BC-105);
- E. 3-hp Feeder Spillage Conveyor (PCC-SC-101);
- F. 5-hp Transfer Spillage Conveyor;
- G. 125-hp Stacker Transfer Conveyor;
- H. 150-hp Apron Feeder (PCC-FD-100);
- I. 7.5-hp Primary Crusher A Fabric Collector (PCC-DC-100);
- J. 7.5-hp Primary Crusher B Fabric Collector (PCC-DC-101);
- 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. Fabric collector exhaust stack shall be equipped with adequate provisions facilitating collection of samples consistent with U. S. EPA test methods, i.e. capped sample ports in accessible location of uniform flow. (Rule 108.1)
3. 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)
4. Screw conveyors and belt conveyor transfer points shall be covered while operating. (Rule 210.1 BACT Requirement)
5. Visible emissions from fabric collector stacks shall not exceed 5% opacity. (Rule 210.1 BACT Requirement and Rule 422 NSPS, Subpart OOO).
6. Particulate matter emission concentration from each fabric collector exhaust stack shall not exceed 0.02-gr/scf. (Rule 210.1 BACT Requirement and Rule 422 NSPS, Subpart OOO)
Emission Unit 001 Permit Conditions

7. 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 and Rule 210.1)

8. Each fabric collector pulse-jet cleaning mechanism shall be provided with compressed air supply of adequate pressure and volume. (Rule 210.1)

9. Visible emissions generated by front-end loaders adding material into apron feeder shall not exceed 15% opacity. (Rule 422 NSPS, Subpart OOO)

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. 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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be demonstrated pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 45 days of District request or initial use of equipment. (Rule 108.1)

EMISSION LIMITS:

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

Particulate Matter:

<table>
<thead>
<tr>
<th>Collector Type</th>
<th>Maximum Emission Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Crusher A Fabric Collector</td>
<td>0.02 gr./dscf (Rule 422)</td>
</tr>
<tr>
<td></td>
<td>0.58 lb/hr</td>
</tr>
<tr>
<td></td>
<td>13.89 lb/day (PM$_{10}$)</td>
</tr>
<tr>
<td></td>
<td>2.53 ton/yr</td>
</tr>
<tr>
<td>Primary Crusher B Fabric Collector</td>
<td>0.02 gr./dscf (Rule 422)</td>
</tr>
<tr>
<td></td>
<td>0.58 lb/hr</td>
</tr>
<tr>
<td></td>
<td>13.89 lb/day (PM$_{10}$)</td>
</tr>
<tr>
<td></td>
<td>2.53 ton/yr (PM$_{10}$)</td>
</tr>
<tr>
<td>Fugitive Emissions (Loading, Conveyors, Open Storage, etc.)</td>
<td>2.05 lb/hr (PM$_{10}$)</td>
</tr>
<tr>
<td></td>
<td>49.09 lb/day (PM$_{10}$)</td>
</tr>
<tr>
<td></td>
<td>8.95 ton/yr (PM$_{10}$)</td>
</tr>
</tbody>
</table>
Emission Unit 001 Permit Conditions

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

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)
Emission Unit 002 Permit

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>002</td>
<td>Secondary Screening &amp; Crushing Operation</td>
</tr>
</tbody>
</table>

**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.
Emission Unit 002 Permit Conditions

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);

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 motor;

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.

DESIGN CONDITIONS:

a. Fabric collector and wet scrubber each shall be equipped with operational differential pressure indicator. (Rule 210.1)

b. Each fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)

c. All conveyors shall be equipped with dust-tight covers. (Rule 210.1)

OPERATIONAL CONDITIONS:

1. Particulate matter exhaust concentration from fabric collector MDK-DC-101 shall not exceed 0.01-gr/scf without prior District approval. (Rule 210.1 BACT Requirement)

2. 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)

3. Process weight rate for each cage mill crusher shall not exceed 450-tons per hour without prior District approval. (Rule 210.1)

4. Visible emissions from fabric collector and conveyors shall not exceed 7 percent opacity. (Rule 422, Subpart OOO)

5. 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)

6. Fabric collectors shall be maintained in proper working order. (Rule 210.1)

7. Process shall not be operated unless emission control equipment is in operation. (Rules 210.1 and 209)

8. Material removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
9. All material transfer points and storage bins shall be vented to dust collector. (Rule 209)

10. 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 fabric collector (DIS-DC-005). (Rule 210.1)

11. There shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)

12. Screen covers shall always be in place during operation. (Rule 210.1)

13. All exhaust ducts shall be connected to appropriate collection equipment. (Rule 210.1)

14. All collection equipment shall be strictly maintained. (Rule 209)

15. Free moisture content of ore shall be maintained at no less than 3% by weight. (Rule 401)

16. Collected dust dump hopper shall be maintained dust-tight. (Rule 210.1)

17. Ductwork connecting material drop points and ore storage bins shall be maintained in air-tight condition. (Rule 210.1)

18. 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)

19. Vacuum system shall be operated with collection bags having no tears or similar damage. (Rule 210.1)

20. Process weight rate shall not exceed 1,000 tons per hour without prior District approval. (Rule 210.1)

21. 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)

22. Records of processing throughput shall be maintained and made available upon request for inspection. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Compliance with each fabric collector exhaust PM$_{10}$ 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 (PM$_{10}$):**

| Wet Scrubber (MDK-SB-201) | 0.01 gr/scf | 0.10 lb/hr | 2.4 lb/day | 0.42 tons/yr |

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)
Emission Unit 002 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 209 and 210.1)
Emission Unit 003 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>003</td>
<td>Fluid Bed Dryer/Conveying System</td>
</tr>
</tbody>
</table>

**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 OOO)
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)

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

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)
Emission Unit 003 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 45 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 (PM$_{10}$):**

<table>
<thead>
<tr>
<th>Source</th>
<th>Emissions Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venturi Scrubber Serving Dryer Exhaust (234-DC-096) (13,415 scfm)</td>
<td>0.02 gr/scf</td>
</tr>
<tr>
<td>Bin Vent Collector (234-DC-003) (5,000 scfm)</td>
<td>0.02 gr/scf</td>
</tr>
<tr>
<td>Fabric Collector (234-DC-094) (13,375 scfm)</td>
<td>0.02 gr/scf</td>
</tr>
</tbody>
</table>

**From Natural Gas Combustion in Dryer:**

<table>
<thead>
<tr>
<th>Source</th>
<th>Emissions Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxides of Sulfur (SO$<em>{x}$ as SO$</em>{2}$)</td>
<td>0.02 lb/hr</td>
</tr>
<tr>
<td>Oxides of Nitrogen (NO$<em>{x}$ as NO$</em>{2}$)</td>
<td>2.64 lb/hr</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOC) (as defined in Rule 210.1)</td>
<td>0.15 lb/hr</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>2.22 lb/hr</td>
</tr>
</tbody>
</table>

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)
Emission Unit 003 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 209 and 210.1)
U.S. Borax Inc. Version 2011

Emission Unit 005 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>005</td>
<td>Neobor Rotary Drying Operation</td>
</tr>
</tbody>
</table>

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 NOX 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 conveyors (234-SC-241) with 1.5-hp motor, and bridge belt conveyors (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 conveyors (234-SC-028) with 40-hp motor, and trim screw conveyors (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 conveyors (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 NOX 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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of the District request. Test results shall be submitted to District within 45 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)

(40,000-scfm)

- 0.37 lb/hr
- 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:**

<table>
<thead>
<tr>
<th>Oxides of Sulfur (SO(_x) as SO(_2))</th>
<th>0.04 lb/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.88 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.16 ton/yr</td>
</tr>
</tbody>
</table>

| Oxides of Nitrogen (NO\(_x\) as NO\(_2\)) | 0.52 lb/hr |
|                                          | 12.37 lb/day|
|                                          | 2.26 ton/yr|

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

| Carbon Monoxide | 3.68 lb/hr |
|                | 88.26 lb/day|
|                | 16.11 ton/yr|

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)
Emission Unit 005 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 five years. (Rules 201.1, 209 and 210.1)
Emission Unit 006 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>006</td>
<td>5 Mol Screening</td>
</tr>
</tbody>
</table>

**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 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 OOO)
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 atmosphere. (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)
STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with fabric collector emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 45 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 (PM_{10}):**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Particulate Matter</th>
<th>Hourly Emission</th>
<th>Daily Emission</th>
<th>Annual Emission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabric Collector (BLK-DC-085): (10,734 scfm)</td>
<td>0.03 gr/acf</td>
<td>2.76 lb/hr</td>
<td>66.24 lb/day</td>
<td>12.09 ton/yr</td>
</tr>
<tr>
<td>Fabric Collector (BLK-DC-086): (7,800 scfm)</td>
<td>0.03 gr/acf</td>
<td>2.01 lb/hr</td>
<td>48.14 lb/day</td>
<td>8.79 ton/yr</td>
</tr>
</tbody>
</table>

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

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)
U.S. Borax Inc. Version 2011

Emission Unit 007 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>007</td>
<td>5 Mol High Speed Conveying</td>
</tr>
</tbody>
</table>

**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 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 (PM\textsubscript{10}):**

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 five years. (Rules 201.1, 209 and 210.1)
Emission Unit 008 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>008</td>
<td>5 Mol Railcar Loadout</td>
</tr>
</tbody>
</table>

**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);
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. 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 differential pressure indicators. (Rule 209)
4. All exhaust ducts shall be connected to appropriate collection equipment. (Rule 210.1)
5. 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 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 (SHP-DC-119):

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>gr/acf</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>lb/hr</td>
<td>5.27</td>
<td></td>
</tr>
<tr>
<td>lb/day</td>
<td>126.51</td>
<td></td>
</tr>
<tr>
<td>ton/yr</td>
<td>23.09</td>
<td></td>
</tr>
</tbody>
</table>

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)
Emission Unit 008 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 five years. (Rules 201.1, 209 and 210.1)
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 - 24 inch lift, bucket elevator, 3-hp (PPK-EL-143);
J.  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 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)
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)
Emission Unit 009 Permit Conditions

8. Packers shall be operated with no visible emissions. (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)

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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with 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.

EMISSION LIMITS:

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

Particulate Matter (PM$_{10}$):

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 to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)
Emission Unit 010 Permit Conditions

<table>
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<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
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</thead>
<tbody>
<tr>
<td>1004</td>
<td>010</td>
<td>5 Mol Furnace Feed</td>
</tr>
</tbody>
</table>

**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 (PM$_{10}$):**

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 to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)
Emission Unit 012 Permit Conditions

<table>
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<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
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<tbody>
<tr>
<td>1004</td>
<td>012</td>
<td>10 Mol Dryer #2</td>
</tr>
</tbody>
</table>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

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

B. Screw conveyor, 234-SC-183;
C. 5-hp high roller belt conveyer, 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

**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)

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

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)
COMPLIANCE TESTING REQUIREMENTS:
Should inspection reveal conditions indicative of non-compliance, compliance with 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)
Facility Number 1004 Emissions Unit 013 Description of Source 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 conveyer, 234-SC-013;
B. 2-hp screw conveyer, 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 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. (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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)
Emission Unit 013 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 45 days of District request. (Rule 108.1)
Emission Unit 014 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>014</td>
<td>10 Mol Dryer #4</td>
</tr>
</tbody>
</table>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:**

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 conveyor, 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)

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

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

**COMPLIANCE TESTING REQUIREMENTS:**

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

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>015</td>
<td>10 Mol Dryer #5</td>
</tr>
</tbody>
</table>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

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

A. 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. 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)

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

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

**COMPLIANCE TESTING REQUIREMENTS:**

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

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>016</td>
<td>10 Mol Crushing/Screening Operation</td>
</tr>
</tbody>
</table>

**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.
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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with 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.)
Emission Unit 016 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 five years. (Rules 201.1, 209 and 210.1)
Emission Unit 017 Permit Conditions

<table>
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<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>017</td>
<td>10 Mol Railcar Loadout</td>
</tr>
</tbody>
</table>

**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):

<table>
<thead>
<tr>
<th>Unit</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.03 gr/acf</td>
<td>0.50 lb/hr</td>
</tr>
<tr>
<td>12.00 lb/day</td>
<td>2.1 ton/yr</td>
</tr>
</tbody>
</table>

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

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)
Emission Unit 018 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>018</td>
<td>10 Mol Packing</td>
</tr>
</tbody>
</table>

**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)
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 to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)
Emission Unit 019 Permit Conditions

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 (PM$_{10}$):**

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 to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)
Emission Unit 027 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
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</thead>
<tbody>
<tr>
<td>1004</td>
<td>027</td>
<td>Line 7 Fusing</td>
</tr>
</tbody>
</table>

### 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. 15-MMBtu/hr fusing furnace (ABX-FC-007) with combustion air blower (ABX-FN-285) with 150-hp motor, atomizing air blower (ABX-FN-286), rear wall cooling (ABX-FN-288) with 40-hp motor with Venturi scrubber (ABX-FN-129), 1500-hp scrubber fan (ABX-FN-057) and exhaust stack scrubber fan (ABX-99-095).

**OPERATIONAL CONDITIONS:**

1. Visible emissions from any single emission point shall be less than 20% opacity. (Rule 401)
2. Maximum allowable process weight - 41,000 lb/hour. (Rule 401)
3. Nozzles in venturi shall be strictly maintained. (Rule 209)
4. Collector shall have operational manometer. (Rule 209)
5. Venturi 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 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 027 Permit Conditions

**Particulate Matter (PM$_{10}$):**

29.01 lb/hr

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

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)
### Emission Unit 028 Permit Conditions

<table>
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<th>Facility Number</th>
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<th>Description of Source</th>
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</thead>
<tbody>
<tr>
<td>1004</td>
<td>028</td>
<td>Line 7 Cooling/Milling/Screening</td>
</tr>
</tbody>
</table>

#### 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 IBC (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;

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);

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 45 days 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 five years. (Rules 201.1, 209 and 210.1)
Emission Unit 029 Permit Conditions

Facility Number  Emission Unit Description of Source
1004    029    Anhydrous Borax Screening/Loadout East

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)
Emission Unit 029 Permit Conditions

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. 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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to 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 (PM$_{10}$) Emissions:**

<table>
<thead>
<tr>
<th>Fabric Collector:</th>
<th>0.02 grains/scf</th>
</tr>
</thead>
<tbody>
<tr>
<td>(BLK-DC-200)</td>
<td>2.41 lb/hr</td>
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<tr>
<td></td>
<td>57.90 lb/day</td>
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<tr>
<td></td>
<td>10.57 ton/yr</td>
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</table>

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

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 209 and 210.1)
Emission Unit 030 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>030</td>
<td>Anhydrous Borax Screening/Loadout West</td>
</tr>
</tbody>
</table>

**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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Compliance with fabric collector exhaust PM$_{10}$ 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 (PM$_{10}$):**

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 five years. (Rules 209 and 210.1)
Emission Unit 031 Permit Conditions

<table>
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<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
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<tbody>
<tr>
<td>1004</td>
<td>031</td>
<td>Anhydrous Borax Packing</td>
</tr>
</tbody>
</table>

**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)
U.S. Borax Inc. Version 2011

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)

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

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

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with 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:**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Limit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.01 grains/dscf (of PM)</td>
<td>Rule 210.1 BACT Requirement</td>
</tr>
<tr>
<td></td>
<td>0.43 lb/hr (of PM)</td>
<td></td>
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<tr>
<td></td>
<td>5.12 lb/day (of PM_{10})</td>
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</tr>
<tr>
<td></td>
<td>0.64 ton/yr (of PM_{10})</td>
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</tbody>
</table>

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

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 209 and 210.1)
## Emission Unit 032 Permit Conditions

### 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 0.33-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)
Emission Unit 032 Permit Conditions

4. Venturi scrubber shall be equipped with operational differential pressure indicator. (Rule 210.1)
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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 45 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):**

<p>| | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td>grains/scf</td>
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<tr>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2.66</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ton/yr</td>
</tr>
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</table>

**Fabric Collector (ABA-DC-142):**

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<tr>
<td></td>
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<td></td>
<td></td>
<td>0.22</td>
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<td></td>
<td></td>
<td>ton/yr</td>
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</table>

**Venturi Scrubber(ABA-DC-056):**

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<tr>
<td></td>
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<td></td>
<td></td>
<td>26.94</td>
</tr>
<tr>
<td></td>
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<td>ton/yr</td>
</tr>
</tbody>
</table>

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)
Emission Unit 032 Permit Conditions

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 five years. (Rules 209 and 210.1)
## Emission Unit 033 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>033</td>
<td>Anhydrous Boric Acid Cooling/Milling/Screening/Storage IBC Load-out Operation</td>
</tr>
</tbody>
</table>

### Emission Unit Equipment Description/Permit Conditions

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Anhydrous Boric Acid Cooling/Milling/Screening/Storage IBC Load-out Operation, including following equipment:

- **A.** 10-hp chill roll set (ABA-CR-011 and 012);
- **B.** 15-hp pan conveyor with hood and exhaust stack (ABA-CM-022);
- **C.** Sheet breaker (ABA-ML-031) with 10-hp motor;
- **D.** 10-hp cooling conveyor (ABA-CM-023). Equipment listed in A, B, C, and D is served by cyclone collector (ABA-DC-050) that connects to one fabric collector (ABA-DC-051) with 75-hp fan (ABA-FN-198);
- **E.** Lump breaker (ABA-ML-032) with 7.5 motor, one cyclone dust recycle (ABA-BC-142) and two oversize return conveyor belts (ABA-BC-143 and 144) with 1-hp motors, one hammermill feed elevator (ABA-EL-098) with 6-hp motor, one hammermill feed bin (ABA-BN-264), two crusher feeders (ABA-FD-296 and297), two hammermill feeders (BAP-FD-001 and 002), three 75-hp hammermills (ABA-ML-041, 042, and 045), one screen bin feed elevator (ABA-EL-099) with 7.5-hp motor, one screen feed bin (ABA-BN-265) with feeder ABA-FD-002;
- **F.** Scalping screen with 2.5-hp motor (ABA-SN-094) tied to existing fabric collector (ABA-DC-052); Cyclones between screens & cyclone
- **G.** 4 mesh IBC packing station (ABA-PK-002) with reject conveyor ABA-BC-149;
- **H.** Enclosed screen with two decks 60 in x 120 in powered by 7.5-hp electric motors (ABA-SN-002);
- **I.** Finished product belt conveyor (ABA-BC-146) with 1-hp motor, one finished product weigh belt (ABA-WD-037) with 0.5-hp motor, one dual compartment holding tank (ABA-BN-266), one conveyor belt to silo elevator (ABA-BC-148) with 1.5-hp motor, elevator (ABA-EL-104), one finished product elevator (ABA-EL-100) with 10-hp motor, one ABA silo fill conveyor belt (ABA-BC-154) with 7.5-hp blower motor (ABA-FN-001);
- **J.** 60 mesh IBC packing station (ABA-PK-001);
- **K.** Four silos (ABA-BN-281 through 284); and.
- **L.** Product dust collector (ABA-DC-053) with 75-hp exhaust fan (ABA-FN-199), one top ABA silos dust collector unit (ABA-DC-062) with 25-hp exhaust fan (ABA-FN-002).

### 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)
Emission Unit 033 Permit Conditions

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. Screen covers shall be in place during operation. (Rule 210.1)

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 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:**

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:**

0.02 gr/dscf (of PM) (Rule 422)

1.82 lb/day (of PM\textsubscript{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 five years. (Rules 209 and 210.1)
Emission Unit Equipment Description/Permit Conditions

Emission Unit 035 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>035</td>
<td>Anhydrous Boric Acid Loadout</td>
</tr>
</tbody>
</table>

Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:**  Anhydrous Boric Acid Loadout, including the 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


**OPERATIONAL CONDITION:**

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)
Emission Unit 040 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>040</td>
<td>Boiler #5</td>
</tr>
</tbody>
</table>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Boiler #5, including following equipment:

150 Million Btu/hr fuel oil API 32 boiler #5 (STM-BO-010).

**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. Exhaust gas particulate matter concentration shall be no more than 0.1-gr/scf calculated to 12% CO₂. (Rule 409)
3. Sulfur compound emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Unit shall comply with Rule 425.2 NOₓ minimization tuning procedure or shall operate in manner maintaining stack gas oxygen content at no more than 3% by volume. (Rule 425.2)
5. 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 following:

   - Oxides of Nitrogen: 70 ppmv (gaseous fuel)
   - 115 ppmv (liquid fuel)
   - Carbon Monoxide: 400 ppmv

6. Operator shall comply with applicable monitoring, testing, and record keeping requirements of Rule 425.2. (Rule 425.2)
7. Operator shall maintain annual records of fuel use. (Rule 425.2)
8. Oxides of nitrogen (as NO₂) emission rate shall not exceed 56 lb per hour. (Rule 210.2)
Emission Unit 041 Permit Conditions

Facility Number Emissions Unit Description of Source
1004 041 Boiler #6

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boiler #6, including following equipment:
150 Million Btu/hr fuel oil API 32 boiler #6 (STM-BO-013).

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. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf calculated to 12% CO2.
   (Rule 409)
3. Sulfur compound emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide
   (SO2). (Rule 407)
4. Unit shall comply with Rule 425.2 NOX minimization tuning procedure or shall operate in manner
   maintaining stack gas oxygen content at no more than 3% by volume. (Rule 425.2)
5. 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 following:
      Oxides of Nitrogen: 70 ppmv (gaseous fuel)
                          115 ppmv (liquid fuel)
      Carbon Monoxide:  400 ppmv
6. Operator shall comply with applicable monitoring, testing, and record keeping requirements of Rule
   425.2. (Rule 425.2)
7. Operator shall maintain annual records of fuel use. (Rule 425.2)
8. Oxides of nitrogen (as NO2) emission rate shall not exceed 45.5 lb per hour. (Rule 210.2)
Emission Unit 047 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>047</td>
<td>Research Pilot Plant</td>
</tr>
</tbody>
</table>

**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 (EQ #2000036) - Pilot Plant Test Magnetic Separation;
H. Fabric collectors (EQ #2000021) - Plant "C" Test XPI 241;
I. Fabric collector (EQ #200006) - Plant "B" Test XPI 231;
J. Fabric collector (EQ #2000037) – serving Roll Mill No. 1;
K. Fabric collector (EQ #2000038) – serving Roll Mill No. 2;
L. 2 –Roll Mills (Nos. 1 and 2) each with two 7.5 hp motors (30 hp total);
M 18” diameter high efficiency cyclone (new); and
N. 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 2000037 and 2000038 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)
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)

No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

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 45 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 (PM_{10}) Emissions:**

<table>
<thead>
<tr>
<th>Source</th>
<th>Particulate Matter (PM_{10})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabric Collector 2000037:</td>
<td>0.015 grains/scf</td>
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<tr>
<td></td>
<td>0.001 lb/hr</td>
</tr>
<tr>
<td></td>
<td>0.02 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.004 ton/yr</td>
</tr>
<tr>
<td>Fabric Collector 2000038:</td>
<td>0.015 grains/scf</td>
</tr>
<tr>
<td></td>
<td>0.01 lb/hr</td>
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<td>0.04 lb/day</td>
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<tr>
<td></td>
<td>0.01 ton/yr</td>
</tr>
<tr>
<td>Balance of Research Pilot Plant:</td>
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<tr>
<td>Particulate Matter (PM_{10}):</td>
<td>0.06 lb/hr</td>
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<tr>
<td></td>
<td>0.49 lb/day</td>
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<tr>
<td></td>
<td>0.07 ton/yr</td>
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<tr>
<td>Sulfur Oxides (Sox as SO_{2}):</td>
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<tr>
<td></td>
<td>0.01 lb/day</td>
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<tr>
<td></td>
<td>0.00 ton/yr</td>
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<tr>
<td>Oxides of Nitrogen (NO_{2}):</td>
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<td>2.72 lb/day</td>
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<tr>
<td></td>
<td>0.37 ton/yr</td>
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</tbody>
</table>
Emission Unit 047 Permit Conditions

Volatile Organic Compounds (VOC):
- 0.01 lb/hr
- 0.08 lb/day
- 0.01 ton/yr

Carbon Monoxide:
- 0.59 lb/hr
- 4.73 lb/day
- 0.64 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 five years. (Rules 209 and 210.1)
Emission Unit 048 Permit Conditions

<table>
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<tr>
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<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>048</td>
<td>Anhydrous Boric Acid Packing</td>
</tr>
</tbody>
</table>

**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 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 (PM\textsubscript{10}):**

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 to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)
Emission Unit 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.)
Emission Unit 049 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 five years. (Rules 201.1, 209 and 210.1)
Emission Unit 050 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emission Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>050</td>
<td>5 Mol Fines Receiving/Storage/Handling</td>
</tr>
</tbody>
</table>

**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 storage tank with fabric collector (#2000112);
B. Pneumatic conveying system to two alleviators, exhaust gas returned to fabric collector;
C. Two 5 Mol addition systems including four enclosed augers and two enclosed transfer points to two existing bird centrifuge output belts; and
D. Bin vent fabric collector (#2000112).

**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)

**EMISSION LIMITS:**

Maximum emission 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.)
Emission Unit 050 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 five years. (Rules 201.1, 209 and 210.1)
Emission Unit 053 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>053</td>
<td>5 Mol/R46 Truck Loadout Operation</td>
</tr>
</tbody>
</table>

**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;

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 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):**

<table>
<thead>
<tr>
<th>Source Description</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabric Collector (BLK-DC-086) (shared with 1004006)</td>
<td>0.03 gr/scf</td>
</tr>
<tr>
<td></td>
<td>2.01 lb/hr</td>
</tr>
<tr>
<td></td>
<td>48.14 lb/day</td>
</tr>
<tr>
<td></td>
<td>8.79 Ton/yr</td>
</tr>
</tbody>
</table>

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

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)
Emission Unit 056 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>056</td>
<td>Boiler #7</td>
</tr>
</tbody>
</table>

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Boiler #7, including following equipment:

A. 171 Million Btu/hr steam boiler assembly (STM-B0-018); and
B. Two circular type combination oil/natural gas fired burner assemblies.

**OPERATIONAL CONDITIONS:**

1. Burner shall utilize air atomization during startup. (Rule 209)
2. Burner shall utilize steam atomization during normal operation. (Rule 209)
3. Fuel oil shall be preheated (if necessary to maintain Saybolt Universal (seconds) viscosity of no more than 150). (Rule 209)
4. Burner shall utilize automatic fuel shutoff in event of flameout. (Rule 209)
5. Burners shall utilize the following instrumentation: (Rule 209)
   a. Fuel oil injection pressure indicator;
   b. Steam atomization pressure indicator; and
   c. Fuel oil volume flowrate indicator.
6. Fuel oil sulfur content shall not exceed 0.4% by weight. (Rule 209)
7. Fuel oil consumption shall not exceed 1,297 gallons per hour. (Rule 209)
8. 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)
9. Exhaust gas particulate matter concentration shall be no more than 0.1-gr/scf calculated to 12% CO₂. (Rule 409)
10. Sulfur compound emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
11. Unit shall comply with Rule 425.2 NOₓ minimization tuning procedure or shall operate in manner maintaining stack gas oxygen content at no more than 3% by volume. (Rule 425.2)
12. 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 following:
   
   Oxides of Nitrogen:  
   - 70 ppmv (gaseous fuel)  
   - 115 ppmv (liquid fuel)  
   
   Carbon Monoxide: 400 ppmv
13. Operator shall comply with applicable monitoring, testing, and record keeping requirements of Rule 425.2. (Rule 425.2)
14. Operator shall maintain annual records of fuel use. (Rule 425.2)
Emission Unit 056 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 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 (PM$_{10}$) | 7.78 lb/hr | 186.72 lb/day | 34.08 ton/yr |
| Oxides of Sulfur (as SO$_2$) | 80.72 lb/hr | 1937.28 lb/day | 353.55 ton/yr |
| Oxides of Nitrogen (as NO$_2$) | 55.1 lb/hr | 1322.4 lb/day | 241.34 ton/yr |
| Volatile Organic Compounds (VOC) | 1.30 lb/hr | 31.20 lb/day | 5.69 ton/yr |
| Carbon Monoxide | 6.49 lb/hr | 155.76 lb/day | 28.43 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 five years. (Rules 201.1, 209 and 210.1)
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)
STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 45 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 (PM$_{10}$) Emissions:**

<table>
<thead>
<tr>
<th>Source</th>
<th>Unit Type</th>
<th>Emission Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conveyor/Transfer</td>
<td>lb/hr</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>lb/day</td>
<td>15.84</td>
</tr>
<tr>
<td></td>
<td>ton/yr</td>
<td>2.89</td>
</tr>
<tr>
<td>Fabric Collector</td>
<td>grains/scf</td>
<td>0.01</td>
</tr>
<tr>
<td>(BAP-DC-140)</td>
<td>lb/hr</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>lb/day</td>
<td>3.45</td>
</tr>
<tr>
<td></td>
<td>ton/yr</td>
<td>0.63</td>
</tr>
<tr>
<td>Fabric Collector</td>
<td>grains/scf</td>
<td>0.01</td>
</tr>
<tr>
<td>(BAP-DC-141)</td>
<td>lb/hr</td>
<td>0.11</td>
</tr>
<tr>
<td></td>
<td>lb/day</td>
<td>2.57</td>
</tr>
<tr>
<td></td>
<td>ton/yr</td>
<td>0.47</td>
</tr>
</tbody>
</table>

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

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 209 and 210.1)
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. Impactor secondary crusher (BAP-HM-1), enclosed with 200-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, 20-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. 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. Sulfur compounds (as SO₂) shall be less than 0.2% by volume (2,000 ppmv). (Rule 407)
5. Fabric collectors shall be in operation when related equipment is in operation. (Rule 210.1)
6. 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)
7. All material conveyors shall be covered/enclosed and shall have no visible emissions. (Rules 210.1)
8. All piping, ducting, connections, and elevators shall be leak-tight and shall have no visible emissions. (Rule 210.1)
9. Conveyors shall be covered when in operation. (Rule 210.1)
10. Fines collected in fabric collectors shall be returned to process. (Rule 210.1)
11. Scrubber liquid supply (at scrubber inlet) shall have operational pressure indicator. (Rule 210.1)
12. Scrubber liquid supply line (at scrubber inlet) shall 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)
Emission Unit 059 Permit Conditions

16. Area of Unconfined storage shall not exceed 900-sq.ft. (Rule 210.1)
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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with fabric collector emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 45 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 (PM$_{10}$):**

<table>
<thead>
<tr>
<th>Source</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabric Collector</td>
<td>0.01 grains/scf</td>
</tr>
<tr>
<td>@ 1,400-acfm</td>
<td>0.12 lb/hr</td>
</tr>
<tr>
<td>MikroPul (BAP-DC-142)</td>
<td>2.88 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.53 ton/year</td>
</tr>
<tr>
<td>Fabric Collector</td>
<td>0.01 grains/scf</td>
</tr>
<tr>
<td>@ 6,500-acfm</td>
<td>0.56 lb/hr</td>
</tr>
<tr>
<td>MikroPul (BAP-DC-143)</td>
<td>13.37 lb/day</td>
</tr>
<tr>
<td></td>
<td>2.44 ton/yr</td>
</tr>
</tbody>
</table>

**Particulate Matter (PM$_{10}$):**

<table>
<thead>
<tr>
<th>Source</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconfined Storage</td>
<td>1.68 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.01 ton/year</td>
</tr>
</tbody>
</table>
U.S. Borax Inc. Version 2011

Emission Unit 059 Permit Conditions

**H$_2$SO$_4$ (as SO$_2$):**

<table>
<thead>
<tr>
<th>Wet Scrubber:</th>
<th>1.29 lb/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>(No. 2000135)</td>
<td>30.96 lb/day</td>
</tr>
<tr>
<td></td>
<td>5.65 ton/yr</td>
</tr>
</tbody>
</table>

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

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 209 and 210.1)
Emission Unit 060 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emission Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>060</td>
<td>Boric Acid #1 Drying/Screening/Milling/Storage Operation</td>
</tr>
</tbody>
</table>

Emission Unit Equipment Description/Permit Conditions

**Federally Enforceable Conditions**

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

A. Dryer (BAP-DR-006) with 11-tph capacity including 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)
STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Compliance with each fabric collector exhaust PM$_{10}$ 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 (PM$_{10}$):**

| 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 to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)
Emission Unit 061 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

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

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

**COMPLIANCE TESTING REQUIREMENTS:**

Compliance with each fabric collector exhaust PM$_{10}$ 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 (PM$_{10}$):**

| 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 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)
Federally Enforceable Conditions

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

A. 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)
STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Compliance with each fabric collector exhaust PM$_{10}$ 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 (PM$_{10}$):**

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 to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)
Facility Number 1004
Emission Unit 063 Permit Conditions

Description of Source: Boric Acid Conveying & Truck Loadout Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boric Acid Conveying & Truck Loadout Operation, including the 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 20-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 20-hp motor;
P. Day bins feed screw conveyor (BAP-SC-032), 20" dia. X 32.8' long with 20-hp motor;
Q. Two day bins feed split screw conveyors (BAP-SC-033), each 20" dia. X 94.6' long and each with 20-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. Collected dust inclined screw conveyor (BAP-SC-374) with 7.5-hp motor;
X. Collected 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. Reverse pulse jet cleaning fabric collector (BAP-DC-122) including exhaust blower rated at 8000 scfm with 30-hp motor serving day bins transfer bucket elevator (BAP-EL-003) and six day bins BAP-BN-435 through BAP-BN-440; and

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U.S. Borax Inc. Version 2011

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. Fabric collectors shall be maintained in proper working order. (Rule 209)
6. Fabric dust collector (BAP-DC-122) volumetric exhaust flow rate shall not exceed 14,527 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. 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. (Rule 209)
12. There shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)
13. 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)
14. 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)
15. 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)
16. 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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

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)
U.S. Borax Inc. Version 2011

Emission Unit 063 Permit Conditions

**EMISSION LIMITS:**

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

**Particulate Matter (PM10):**

<table>
<thead>
<tr>
<th>Fabric Collector #</th>
<th>Emission Limit (gr/dscf)</th>
<th>lb/hr</th>
<th>lb/day</th>
<th>tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAP-DC-122</td>
<td>0.02</td>
<td>1.25</td>
<td>29.88</td>
<td>5.45</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAP-DC-123</td>
<td>0.02</td>
<td>0.73</td>
<td>17.56</td>
<td>3.20</td>
</tr>
</tbody>
</table>

(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 5 years. (Rules 201.1, 209 and 210.1)
Emission Unit 064 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>064</td>
<td>Boric Acid Pneumatic Conveying to Storage</td>
</tr>
</tbody>
</table>

**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. 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)
Emission Unit 064 Permit Conditions

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. 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).

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Compliance with each fabric collector exhaust PM$_{10}$ 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 (PM$_{10}$):**

<table>
<thead>
<tr>
<th>Fabric Collector</th>
<th>PM$_{10}$ Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>#BAP-DC-123:</td>
<td>0.02 gr/dscf</td>
</tr>
<tr>
<td></td>
<td>0.73 lb/hr</td>
</tr>
<tr>
<td></td>
<td>17.56 lb/day</td>
</tr>
<tr>
<td></td>
<td>3.20 tons/yr</td>
</tr>
<tr>
<td>#BAP-DC-124:</td>
<td>0.02 gr/dscf</td>
</tr>
<tr>
<td></td>
<td>1.81 lb/hr</td>
</tr>
<tr>
<td></td>
<td>46.33 lb/day</td>
</tr>
<tr>
<td></td>
<td>7.91 tons/yr</td>
</tr>
</tbody>
</table>
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Emission Unit 064 Permit Conditions

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

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 209 and 210.1)
Emission Unit 065 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>065</td>
<td>Boric Acid Off-Specification Recycle Operation</td>
</tr>
</tbody>
</table>

**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:  

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.02 gr/dscf</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.37 lb/hr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>32.88 lb/day</td>
<td></td>
</tr>
</tbody>
</table>

(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 066 Permit Conditions

### 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 (BAS-SC-309, 310, 311, 312);
- **C.** One 70 tph airslide (BAS-CM-63, fan BAS-FN-001) with ventilation;
- **D.** One 70 tph airslide (BAS-CM-64, fan BAS-FN-001) with ventilation;
- **E.** One 70 tph trommel screen (BAS-SN-127) with ventilation;
- **F.** One 70 tph trommel screen (BAS-SN-128) with ventilation;
- **G.** One 63 ton powder mill holding bin (BPK-BN-513) with ventilation;
- **H.** Two 225 ton granulated boric acid packing bins (BPK-BN-451 and 452) with ventilation;
- **I.** One 70 tph bulk rail sampler (BAS-SP-003) with ventilation;
- **J.** Three railcar loadout spouts (West BAS-99-254, East BAS-99-256 and Center BAS-99-455) with ventilation;
- **K.** Two outer railcar dust hoods (BAS-99-002 and 005);
- **L.** Two inner railcar dust hoods (BAS-99-003 and 004);
- **M.** One fabric collector (BAS-DC-125) (shared with PTO 1004063 and 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. 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 (PM\textsubscript{10}):**

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum Emission Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabric Collector (BAP-DC-127)</td>
<td>0.02 gr/scf</td>
</tr>
<tr>
<td></td>
<td>2.73 lb/hr</td>
</tr>
<tr>
<td></td>
<td>65.52 lb/day</td>
</tr>
<tr>
<td></td>
<td>11.96 ton/yr</td>
</tr>
</tbody>
</table>

(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 to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)
Emission Unit 067 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>067</td>
<td>Boric Acid Off-Specification Packing &amp; Railcar Loadout Operation</td>
</tr>
</tbody>
</table>

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

A. Conveyor (BAS-SC-472) with 2-hp motor, under off-spec storage bin (BST-BN-445) that feeds to rotary feeder (BAS-FD-423);
B. Rotary feeder (BAS-FD-423) with 1.5-hp motor;
C. Blower assembly (BAS-FN-475) with 50-hp motor;
D. 4-in. diameter pneumatic conveyor line (BAS-L3-005) that feeds materials from air rotary feeder (BAS-BN-513) to products storage bin (BPK-BN-513);
E. Feeder with 2-hp motor (BPK-SC-473) from base of product storage bin (BPK-BN-513) to classifier;
F. 6-ft. centrifugal air classifier/separator (BPK-99-393) with 15-hp motor;
G. International-Stanley 6-in. rotary sampler (BPK-SP-007);
H. 5-in. volumetric screw feeder (BST-FD-001) located at the base of off-specification bin (BPK-BN-516);
I. Fine boric acid storage bin (BPK-BN-642) with 17-ton capacity;
J. Screw conveyor (HC-31) transferring fine boric acid dust from (BPK-BN-642) 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 BPK-DC-TP3 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)
Emission Unit 067 Permit Conditions

9. Equipment shall be maintained according to manufacturer’s specifications to ensure compliance with emissions limitations. (Rules 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, Sec 41700)

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

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

**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: (BPK-DC-TP3)  
- 0.14 lb/hr  
- 3.45 lb/day  
- 0.63 ton/yr

Fabric Collector: (BAS-DC-124)  
- 0.02 gr/scf

**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 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 068 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emission Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>068</td>
<td>Boric Acid “Bulk Pak” Loading Operation</td>
</tr>
</tbody>
</table>

**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);  
C. Two gyratory feeders (HFG-6 and HFG-7);  
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;  
F. Recycle/reject bag recycling system with hopper;  
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);  
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);  
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) (BAS-DC-125);  
S. 5,300 cfm cartridge dust collector (BAS-DC-700) 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; 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.  
X. No. 2 "Bulk-Pak" loading operation consisting of coaxially ventilated loading spout 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 DC-125, BAS-DC-700, BPK-DC-009, and BPK-DC-010 shall not exceed 10% opacity or Ringelmann ½ for more than 3 minutes in any one hour. (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 15% 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 45 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 (PM<sub>10</sub>):**

<table>
<thead>
<tr>
<th>Fabric Collector</th>
<th>Particles (gr/scf)</th>
<th>Rate (lb/hr)</th>
<th>Rate (lb/day)</th>
<th>Rate (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC-4 (BAS-DC-125)</td>
<td>0.01</td>
<td>1.24</td>
<td>29.83</td>
<td>5.44</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>(BAP-DC-126)</td>
<td>0.01</td>
<td>0.45</td>
<td>10.90</td>
<td>1.99</td>
</tr>
</tbody>
</table>
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 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 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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)
Emission Unit 069 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 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:

**Sulfur Oxides (SOx 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

<table>
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<th>Emissions Unit</th>
<th>Description of Source</th>
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</thead>
<tbody>
<tr>
<td>1004</td>
<td>070</td>
<td>Sulfuric Acid Day Tank &amp; Feed Operation</td>
</tr>
</tbody>
</table>

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)

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

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

**SPECIAL CONDITION:**

This modification does not authorize any change in emission of any air contaminant. (Rule 210.1)
Emission Unit 071 Permit Conditions

Facility Number Emissions Unit Description of Source
1004 071 5 Mol Truck Loadout Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

A. 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. Blower with 100-hp electric motor;
D. Loadout bypass chute (12 in. dia.) to feed bin;
E. Ductwork (6 in. dia.) from fabric collector (SHP-DC-119);
F. Exhaust fan with 100-hp electric motor and exhaust flow rate of 30,750 cfm (SHP-DC-119);
G. Retractable loading spout, 2-hp, RLS-1; and
H. One screen (SHP-SN-001), dust-tight.

OPERATIONAL CONDITIONS:

1. 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)
2. Fugitive emissions from equipment, such as conveyor transfer points shall be less than 10% opacity.
   (Rule 422)
3. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with
   emissions limitations. (Rules 210.1 and 209)
4. Fabric dust collector shall be in operation when associated equipment is operated. (Rule 210.1)
5. Material collected in dust collector shall be disposed of in manner preventing entrainment in
   atmosphere. (Rule 209)
6. Process weight rate shall not exceed 1,600 tons per day without prior District approval. (Rule 209)
7. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance
   to or endanger comfort, repose, health, or safety of any considerable number of persons or public.
   (Rule 419)

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 071 Permit Conditions

EMISSION LIMITS:

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

**Particulate Matter (PM\textsubscript{10}):**

Fabric Collector SHP-DC-119:  
- \(0.02\) gr/scf  
- \(5.27\) lb/hr  
- \(126.51\) 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 five years. (Rules 201.1, 209, and 210.1)
Emission Unit 073 Permit Conditions

Federally Enforceable Conditions

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

A. 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 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):**

8.5 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 to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209, and 210.1)
Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: 48 MW Cogeneration Facility I, including following equipment:

A. 45-MW (nominal) Cogeneration Facility I, including the following equipment:
   1. 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:
      a. Westinghouse multi-swirl dry-low-NOx burner assemblies (CGE-TB-11); and
      b. Inlet air filtering and conditioning system with silencer (CGE-L3-001)
   2. 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;
   3. 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
   4. 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 the following without prior Eastern Kern Air Pollution Control District (District) approval. (Rule 210.1)
   a. From November through February: 615,500-standard cubic feet per hour(scf/hr), and
   b. From March through October: 615,500-scf/hr
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, California Air Resources Board (ARB), Environmental Protection Agency (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)
Emission Unit 077 Permit Conditions

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)

11. 30-days prior to actual testing, Permittee shall submit the District and EPA the following: 1) quality assurance project plan detailing methods and procedures to be used, and 2) quality assurance test plan. (Rule 108.1)


13. CEM system installed at the Cogeneration facility shall measure stack gas volumetric flow rates. CEM system shall comply with EPA monitoring performance specifications (40 CFR Part 52, Appendix E), and calculations utilized to determine volumetric flow rate and other parameters shall comply with methods stated in 40 CFR Part 60.335, et.al. (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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to the District within 30 days after test completion. (Rule 108.1 and 210.1)
Emission Unit 077 Permit Conditions

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)

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 emission concentration (NOx ppmv) shall not be utilized to determine compliance; however, hourly, daily, and annual emissions 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, 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:
   NO\textsubscript{X} as NO\textsubscript{2}: 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.

**EMISSION LIMITS:**

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

**Particulate Matter (PM\textsubscript{10}):**
- 14.00 lb/hr
- 336.00 lb/day
- 61.32 ton/yr

**Sulfur Oxides (SO\textsubscript{x} as SO\textsubscript{2}):**
- 5.29 lb/hr
- 126.19 lb/day
- 23.03 ton/yr

**Oxides of Nitrogen (NO\textsubscript{x} as NO\textsubscript{2}):**
- **Gas Turbine Engine Only:**
  - November through February:
    - 22.0 ppmv @ 15% O\textsubscript{2}
    - 41.72 lb/hr
    - 1001.20 lb/day
  - March through October:
    - 19.0 ppmv @ 15% O\textsubscript{2}
    - 33.78 lb/hr
    - 810.77 lb/day
  - Annual Emissions:
    - 159.39 ton/yr
- **Gas Turbine Engine and Duct Burner:**
  - 59.39 lb/hr
  - 1,425.36 lb/day
  - 260.08 ton/yr

**Volatile Organic Compounds (VOC):**
- (as defined in Rule 210.1)
  - 2.90 lb/hr
  - 69.60 lb/day
  - 12.70 ton/yr

**Carbon Monoxide:**
- 446.00 lb/hr
- 10,704.00 lb/day
- 1,953.48 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 five years. (Rules 209 and 210.1)
Emission Unit 084 Permit Conditions

<table>
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<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
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</thead>
<tbody>
<tr>
<td>1004</td>
<td>084</td>
<td>Kernite Hydration Operation</td>
</tr>
</tbody>
</table>

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Kernite Hydration Operation, including following equipment:

A. Kernite ore truck dump hopper with water sprays (KER-BN-666);
B. Feedhopper (KERN-BN-390) with 600 tons/hour feeder-breaker (KER-FD-390) with 100-hp feeder motor, 250-hp breaker motor and water sprays at outlet;
C. 50-hp belt conveyor (KER-BC-334);
D. 800-hp crusher, 600 ton/hour capacity with water injections;
E. Enclosed belt feeder with 10-hp motor (KER-BC-001);
F. Two belt conveyors (KR-BC-001) discharging Kernite slurry to trucks;
G. 350 gpm capacity water pump with 100-hp electric motor (KER-PM-002), and water supply pond;
H. 10,000-gallon flush water tank with diesel-fired heater (KER-PM-TK-200);
I. Five 36 in. x 100 ft. portable belt conveyors powered by 20-hp electric motors (currently not in use, stored at Mag Sep Drying area);
J. 36 in. x 100 ft. high lift portable conveyor powered by 25-hp electric motor (currently not used, stored at Mag Sep Drying area);
K. 36 in. x 100 ft. portable horizontal conveyor powered by 10-hp electric motor (currently not used, stored at Mag Sep Drying area); and
L. 36 in. x 100 ft. portable radial stacking conveyor powered by 30-hp electric motor; horizontal conveyor powered by 10-hp electric motor (currently not used, stored at Mag Sep Drying area).

OPERATIONAL CONDITIONS:

1. Adequate water spray(s) shall be provided at all material transfer and crushing points with potential to emit dust. (Rule 209)
2. Each water spray installation shall deliver sufficient water to minimize visible emissions. (Rule 209)
3. Process weight rate shall not exceed 14,400 tons per day. (Rule 209)
4. Hydrated kernite ore (tincal ore) shall be processed only in existing refinery via primary crusher (EU 001) and no increase in process weight rate or hours of operation of existing equipment is authorized. (Rules 109 and 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 084 Permit Conditions

EMISSION LIMITS:

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

**Particulate Matter (PM$_{10}$):**

- 12.00 lb/hr
- 288.00 lb/day
- 52.56 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 five years. (Rules 201.1, 209, and 210.1)
Emission Unit 085 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emission Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>085</td>
<td>Bulk Container Pneumatic Loading Operation</td>
</tr>
</tbody>
</table>

**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 (PM$_{10}$):**

<table>
<thead>
<tr>
<th>Particulate Matter</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.01 gr/scf</td>
</tr>
<tr>
<td></td>
<td>0.48 lb/hr</td>
</tr>
<tr>
<td></td>
<td>11.52 lb/day</td>
</tr>
<tr>
<td></td>
<td>2.10 tons/yr</td>
</tr>
</tbody>
</table>

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

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)
Emission Unit 089 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>089</td>
<td>Gasoline Storage &amp; Dispensing System</td>
</tr>
</tbody>
</table>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION**: Gasoline Storage & Dispensing System, 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 filing (1004089C);

B. Phase I (filling of storage tank) 2-point vapor collection system (VR-102-I) including separate vapor riser with:

<table>
<thead>
<tr>
<th>Component</th>
<th>Manufacturer/Model Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Liquid Fill Adapter</td>
<td>OPW 61SALP-EVR</td>
</tr>
<tr>
<td>2. Liquid Fill Cap</td>
<td>OPW 634TT-EVR</td>
</tr>
<tr>
<td>3. Vapor Adapter</td>
<td>OPW 61VSA-EVR</td>
</tr>
<tr>
<td>4. Vapor Cap</td>
<td>OPW 1711T-EVR</td>
</tr>
<tr>
<td>5. Drop Tube with Overfill Protection</td>
<td>OPW 61T-EVR</td>
</tr>
<tr>
<td>6. Extractor Assembly</td>
<td>OPW 233VM</td>
</tr>
<tr>
<td>7. Float Vent Valve</td>
<td>OPW 53 VML</td>
</tr>
<tr>
<td>8. Pressure Vacuum Relief Valve</td>
<td>Husky 5885</td>
</tr>
</tbody>
</table>

C. 1 – Gasboy Model 9152AXTW-1CF, dispenser equipped with two product nozzles for a total of 2 coaxial vapor assist certified vapor recovery nozzles;

D. Vapor-assist type Phase II (fueling of vehicle tank) vapor collection system (VR-201-H) with 2 nozzles, including the following CARB certified components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Manufacturer/Model Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nozzle</td>
<td>Healy Model 900</td>
</tr>
<tr>
<td>2. Swivel</td>
<td>None</td>
</tr>
<tr>
<td>3. Flow Limiter</td>
<td>Healy Model 1301</td>
</tr>
<tr>
<td>4. Vapor Check Valve</td>
<td>Included with nozzle</td>
</tr>
<tr>
<td>5. Coaxial Hose</td>
<td>Healy 75B</td>
</tr>
<tr>
<td>6. Breakaway Fitting</td>
<td>Healy Model 8701VV</td>
</tr>
<tr>
<td>7. Dispensers</td>
<td>Gasboy Model 9152AXTW-1CF</td>
</tr>
<tr>
<td>8. Vapor Processor</td>
<td>Healy Model 9961 Clean Air</td>
</tr>
<tr>
<td></td>
<td>Separator</td>
</tr>
</tbody>
</table>
U.S. Borax Inc. Version 2011

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 vehicle) gasoline vapor control systems. (Rules 209, 412 and 412.1)
2. Gasoline storage tanks shall be equipped with two-point Phase I vapor control system. (Rule 412)
3. Tank shall be equipped with pressure/vacuum relief valve set to within 10% of maximum working pressure of tank. (Rule 412)
4. Gasoline usage for gasoline storage tanks shall not exceed 540,000 gallons per year without prior District approval. (Rule 210.1)
5. Vapor control system shall be of California Air Resources Board (CARB) certified design and installed, operated, and maintained in accordance with manufacturer's recommendation to prevent at least 98% by weight of all gasoline vapors from entering atmosphere. (Rules 209, 412, and 412.1)
6. All Phase I (filling of storage tank) vapor collection equipment shall be used when tanks are filled. (Rule 412)
7. Phase II (filling of vehicle tank) vapor collection equipment shall be maintained according to manufacturer's recommendations and used when vehicles tanks are filled. (Rules 209 and 412)
8. Gasoline flow through any nozzle shall not exceed 10 gallons per minute. (Rule 412.1)
9. Retail stations shall post following: Illustrated instructions for dispensing fuel to vehicle; warning that topping off is prohibited; and toll-free number for registering complaints regarding operation of vapor recovery system. (Rule 209)
10. Tanks shall be equipped with permanently submerged fill pipe terminating no more than six inches from bottom of tank. (Rule 412)
11. The Phase II Vapor Recovery System shall be installed, started up, maintained and repaired only by person(s) certified by the system manufacturer(s) to perform such work. A copy of such person's certification shall be kept in the facility's repair log. (Rule 412.1)
12. The vapor recovery systems and their components shall be operated and maintained in accordance with the State certification requirements. (Rules 412 and 412.1)
13. 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)
14. 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)
15. The permittee shall perform the required maintenance as specified in CARB-Approved Installation and Maintenance Manual for the Phase I Vapor Recovery System. (Rule 412)
16. The permittee shall install, operate and maintain the Phase II Vapor Recovery System as specified in the CARB-approved Installation, Operation and Maintenance Manual for the Phase II Vapor Recovery System. (Rule 412.1)
17. The permittee shall perform and pass a Static Leak Test for Underground Tanks using CARB TP-201.3 in accordance with Exhibit 8 of Executive Order VR-201-H at least once every 12 months. (Rule 412.1)
18. The permittee shall perform and pass a Dynamic Back Pressure Test using CARB TP-201.4 at least once every 12 months. (Rule 412)
Emission Unit 089 Permit Conditions

19. The permittee shall perform and pass a Vapor-to-Liquid Volume Ratio Test using the test procedure from Exhibit 5 of Executive Order VR-201-H at least once every twelve (12) months from the date of the last successfully passed test. (Rule 412.1)

20. The permittee shall perform and pass a Static Pressure Test for the Healy Clean Air Separator using the test procedure from Exhibit 4 of Executive Order VR-201-H at least once every 12 months. (Rule 412.1)

21. The permittee shall perform and pass a Nozzle Bag Test using the test procedure from Exhibit 7 of Executive Order VR-201-H at least once every 12 months. (Rule 412.1)

22. The permittee shall perform and pass a Pressure Integrity of Drop Tube Drain Valve Assembly Test using CARB TP-201.1C or a Pressure Integrity of Drop Tube Overfill Protection Devices Test using CARB TP-201.1D if an overfill protection device is installed, at least once every twelve (12) months. (Rule 412)

23. The permittee shall perform and pass a "Static Torque of Rotatable Phase I Adaptors" test using CARB procedure TP-201.1B at least once every three years. (Rule 412)

24. The permittee shall perform and pass a pressure integrity test on all pressure/vent (PV) valves at the facility in accordance with CARB Test Procedure TP-201.2B at least once every 12 months. (Rule 210.1)

25. The operator shall implement a periodic maintenance inspection program for the certified Phase II vapor recovery system in accordance with CARB 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 CARB Executive Orders, Approval Letters, and District Permits;
   b. The manufacturer's specifications and instructions for installation, operation, repair, and maintenance required pursuant to CARB 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-CARB 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, CARB Executive Orders, and District permit conditions, including replacement schedules for failure or wear prone components. (Rule 412.1)

26. 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; and
   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)

27. The operator shall maintain monthly gasoline throughput records. (Rule 412.1)

28. 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)

29. 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. (Rules 412 and 412.1)
30. 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)

31. The District shall be notified by the permittee 30 days prior to each test. The test results shall be submitted to the District no later than 30 days after each test. (District Rule 108.1)

32. 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)

33. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)

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

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

**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 EKAPCD within 30 days after test completion. (Rule 108.1 and 210.1)

**SPECIAL CONDITIONS:**

aa. Vapor-return and/or vapor control systems used to comply with requirements of this Permit to Operate shall comply with all safety, fire, weights and measures, and other applicable codes and/or regulations. (Rule 412)

bb. Equipment shall be installed and tested in accordance with attached ARB Executive Orders VR-102-K and VR-201-M. (Rule 412.1)

cc. Owner/operator shall complete and pass the Liquid Condensate Trap Compliance Test Procedure using test procedure from Exhibit 9 of Executive Order VR-201-M at least once every 12 months, if applicable. (Rule 412.1)
EMISSION LIMITS:

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

**Volatile Organic Compounds (VOC):**

- 2.59 lb/day
- 0.47 ton/yr

(As defined in Rule 210.1)

(Emission based upon average daily throughput of 2,000 gallons per 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 five years. (Rules 209 and 210.1)
Emission Unit 104 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>104</td>
<td>Cooling Tower (Cells 1-5)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>105</td>
<td>Cooling Tower (2 Cells)</td>
</tr>
</tbody>
</table>

**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 (BAP-CT-103).

**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 110 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>110</td>
<td>Anhydrous Borax Bulk Container End Loading Conveyor</td>
</tr>
</tbody>
</table>

Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Anhydrous Borax Bulk Container End Loading Conveyor, including following equipment:

One portable "trojan horse" telescoping belt conveyor, 7.5-hp total vented to #2000115 or #2000116 (shared with PTO 029).

**OPERATIONAL CONDITIONS:**

1. Only 12 and 30 mesh anhydrous borax shall be loaded by this unit. (Rule 209)
2. There shall be no visible emissions from this unit. (Rule 210.1)

**EMISSION LIMITS:**

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

**Particulate Matter (PM\textsubscript{10}):**

| Fabric Collector #2000116: | 5.24 lb/hr | 22.00 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 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 5 years. (Rules 201.1, 209, and 210.1)
Emission Unit 164 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>164</td>
<td>Piston Engine with Pump</td>
</tr>
</tbody>
</table>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Piston Engine with Pump, including following equipment:

- 75-Bhp diesel fueled piston engine driving Gorman-Rupp Model 3-53 GM pump

**OPERATIONAL CONDITIONS:**

1. Engine crankcase vent shall be equipped with positive ventilation system or 90% efficient control device for crankcase VOC emissions. (Rule 210.1 BACT Requirement)
2. An elapsed time meter shall be installed and maintained indicating in cumulative hours amount 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. Engine operation shall not exceed 500 hours per year without prior District approval. (Rule 210.1)

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

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

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with diesel piston engine emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 45 days after test completion. (Rule 108.1 and 209)
Emission Unit 164 Permit Conditions

**EMISSION LIMITS:**

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

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Unit 1</th>
<th>Unit 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Particulate Matter (PM_{10})</strong></td>
<td>0.44 gm/bhp-hr</td>
<td>0.07 lb/hr</td>
</tr>
<tr>
<td></td>
<td>0.87 lb/day</td>
<td>0.02 ton/yr</td>
</tr>
<tr>
<td><strong>Sulfur Oxides (SO_{2})</strong></td>
<td>0.03 lb/hr</td>
<td>0.38 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.01 ton/yr</td>
<td></td>
</tr>
<tr>
<td><strong>Oxides of Nitrogen (NO_{2})</strong></td>
<td>9.6 gm/bhp-hr</td>
<td>1.59 lb/hr</td>
</tr>
<tr>
<td></td>
<td>19.05 lb/day</td>
<td>0.40 ton/yr</td>
</tr>
<tr>
<td><strong>Volatile Organic Compounds (VOC)</strong></td>
<td>0.08 lb/hr</td>
<td>0.97 lb/day</td>
</tr>
<tr>
<td>(as defined in Rule 210.1)</td>
<td>0.02 ton/yr</td>
<td></td>
</tr>
<tr>
<td><strong>Carbon Monoxide</strong></td>
<td>2.83 lb/hr</td>
<td>33.94 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.71 ton/yr</td>
<td></td>
</tr>
</tbody>
</table>

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

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

Peerless Pump, Model AFF158, 2500-gpm (@ 135 psig) firewater pump driven by Detroit Diesel 412-Bhp diesel fueled piston engine with turbocharger and aftercooler (H2O-PM-074)

OPERATIONAL CONDITIONS:

1. Engine crankcase vent shall be equipped with positive ventilation system or a 90% efficient control device for crankcase VOC emissions. (Rule 210.1 BACT requirement)
2. Engine shall be equipped with turbocharger and after cooler. (Rule 210.1 BACT Requirement)
3. Engine shall be equipped with non-resettable hourly meter showing actual cumulative hours of engine operation. (Rule 210.1)
4. 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)
5. Exhaust gas particulate matter concentration shall not exceed 0.1 grain/ft³ of gas at standard conditions. (Rule 404.1)
6. 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)
7. Equipment shall be maintained according to manufacturer’s specifications to ensure compliance with emissions limitations. (Rules 210.1 and Rule 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 readily available format. (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 and CH&SC Sec 41700)
10. Pump operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
11. 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)
12. As an owner of four or more engines greater than 50-bhp, diesel fire pump engine must comply with Tier I standards by January 1, 2009. Engines utilized for fire protection are exempted under (California Code of Regulations Title 17, Section 93115)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

Should inspection reveal conditions indicative of non-compliance, compliance with diesel piston engine emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 45 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 (PM$_{10}$):**

- 0.17 gm/bhp-hr
- 0.15 lb/hr
- 3.71 lb/day
- 0.02 ton/yr

**Sulfur Oxides (SO$_x$ as SO$_2$):**

- 2.99 lb/hr
- 71.78 lb/day
- 0.30 ton/yr

**Oxides of Nitrogen (NO$_x$ as NO$_2$):**

- 8.08 gm/bhp-hr
- 7.34 lb/hr
- 176.17 lb/day
- 0.73 ton/yr

**Volatile Organic Compounds (VOC):**

- 0.20 lb/hr
- 4.80 lb/day
- 0.02 ton/yr

**Carbon Monoxide:**

- 1.51 lb/hr
- 36.19 lb/day
- 0.15 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 five years. (Rules 209 and 210.1)
Emission Unit 177 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>177</td>
<td>Paint Spray Booth</td>
</tr>
</tbody>
</table>

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Paint Spray Booth, including the following equipment:

One 42 in. x 36 in. paint spray booth (Main Shop) with a 1-hp blower and four 20 in. x 20 in. filter pads.

OPERATIONAL CONDITIONS:

1. Should facility-wide VOC emissions from coating of metal parts and product be less than 15 lb/day on each day, operator is exempt from requirements of Rule 410.4. Operator shall maintain records necessary to verify compliance with this exemption. (Rule 410.4)
2. All coatings applied to motor vehicles and mobile equipment are subject to requirements of Rule 410.4A.
3. Spray booth shall be used when coating objects which can be contained within this spray booth. (Rule 209)
4. Coating of Motor Vehicles and Mobile Equipment (Rule 410.4A)
   a. Except as provided below, no person shall refinish, or spot/panel repair any car, truck, van, or motorcycle, or where color match is required, any bus, mobile equipment, or parts and components of such vehicle or equipment, using coating with VOC content in excess of the following limits as applied:

   **VOC Content Limits**
   (Grams of VOC Per Liter of Coating Less Water and Less Exempt Compounds)

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   b. Except as provided above, where color match is not required, no person shall refinish or spot/panel repair any bus, or mobile equipment, or parts and components of such vehicle or equipment using coating with VOC content in excess of the following limits as applied:
### VOC Content Limits

**VOC Content Limits**

*(Grams of VOC Per Liter of Coating Less Water and Less Exempt Compounds)*

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<td>Camouflage</td>
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</table>

---

5. Coating of Metal Parts and Products (Rule 410.4)

No person shall coat any metal part or product excluding those motor vehicles and mobile equipment covered by Rule 410.4A, with VOC content in excess of following limits as applied.

a. All coating except those in b., following, 340 g/l (2.8 lb/gal); and

b. Camouflage, Extreme Performance, Heat Resistant, High Gloss High Performances Architectural, High Temperature, Metallic Topcoat, Silicone Release, and Solar Absorbent Coatings shall not exceed 420 g/l (3.5 lb/gal.).

6. HVLP spray guns shall be operated with air pressure at gun of between 0.1 and 10 psig and with fluid pressure of no more than 50 psig. (Rules 410.4 and 410.4A)

7. Exhaust filters shall be replaced per manufacturer's recommendations to achieve optimum capture as indicated by differential pressure across filters. (Rule 209)

8. Application Equipment Requirements (Rules 410.4 and 410.4A):

No person shall coat metal parts and products or any vehicle, or mobile equipment, or parts and components of such vehicles and equipment, unless one of following methods is used:

a. Brush, dip, or roll coating conducted in accordance with manufacturer's recommendations;

b. Electrostatic or electrodeposition application conducted in accordance with manufacturer's recommendations;

c. High Volume Low Pressure (HVLP) spray equipment operated in accordance with manufacturer's recommendations; or

d. Non-refillable aerosols may only be used to repair minor surface damage and imperfections, provided area to be covered does not exceed 9 square feet.

9. Surface Preparation and Equipment Cleanup Requirements (Rules 410.4 and 410.4A):

No person shall conduct surface preparation or equipment cleanup for activities subject to provisions of this Rule unless following VOC limits are met and methods are used:

a. Surface Cleaning: No material shall be used containing VOC in excess of 200 grams per liter (1.7 lb/gal) of material to remove dirt, oils, or other contaminants prior to application of surface coatings or adhesives;

b. Stripping: No material shall be used containing VOC in excess of 200 grams per liter of material to strip any coating;

c. Cleaning of Coatings Application Equipment: Solvents used for cleaning of coatings application equipment shall comply with both limits specified below:

1. Solvent shall have VOC content of 950 grams or less per liter (7.9 lb/gal) of material; and

2. Solvent shall have VOC composite partial pressure of 35 mm Hg or less at 20°C (68°F).
d. Cleaning Devices and Methods Requirements: No person shall perform solvent cleaning operations unless one of following cleaning devices or methods is used:

1) Wipe cleaning;
2) Spray bottles or containers with maximum capacity of 16 fluid ounces from which solvents are applied without propellant-induced force;
3) Cleaning equipment having 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 cleaning equipment itself;
4) Remote reservoir cold cleaner operated 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 container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container; or
7) Solvent flushing method discharging cleaning solvent into container closed 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 into containers without atomizing into open air. Solvent may be flushed through system by air or hydraulic pressure, or by pumping.

10. Storage and Disposal: Regardless of VOC content, all VOC-containing materials used in solvent cleaning operations, such as solvents, and cloth and paper moistened with solvents, shall be stored in non-absorbent, non-leaking containers kept closed at all times except when filling or emptying. (Rules 410.4 and 410.4A)

11. Record Keeping Requirements (Rules 410.4 and 410.4A)
   a. Current list of VOC containing products in use containing all data necessary to evaluate compliance, including following information, as applicable:
      1) Material name and manufacturer's identification;
      2) Application method;
      3) Material type and specific use instructions, for example, "single stage topcoat" or "precoat shall be applied to bare metal and followed with compliant primer";
      4) Specific mixing instructions;
      5) Maximum VOC content of coating as applied, including thinning solvents, hardeners, etc., excluding water and exempt compounds; and
      6) Coating composition and density.
   b. Daily job, coating, and solvent use records, including following information:
      1) Type of vehicle, equipment, part, or component coated;
      2) Application method (HVLP, brush, rag, aerosol, etc.);
      3) Specific coatings used on each job, e.g. pretreatment wash primer, precoat, topcoat;
      4) Volume in gallons (or liters) of each component and mix ratio;
      5) VOC content in pounds/gallon (or grams/liter) as applied/used;
      6) Specific solvents used;
      7) Volume of each solvent used in gallons (or liters); and
      8) Primers and primer surfacers mixed for use on multiple units may be recorded as single line item provided quantity and VOC content are recorded.
Emission Unit 177 Permit Conditions

c. Purchase records showing date, type, and amount of VOC containing material shall be maintained and be made available to District personnel upon request.
d. All records shall be maintained for five years and made available for inspection by Control Officer upon request.

12. Coatings containing chromium compounds (examples, Zinc Chromate, Strontium Chromate, and Barium Chromate) shall not be spray applied. Roll, dip, or brush applications may be used. (Rule 419)

13. Operation shall not cause nuisance to nearby receptors. (Rule 419)

14. Touch-up, primers, primer surfacers, and precoats may be applied outside of spray booth provided total surface covered does not exceed 9 square feet per vehicle and provided coating does not contain lead or chromium compounds. All other coatings shall be applied within operations spray booth. (Rule 410.4A)
Emission Unit 178 Permit Conditions

**Facility Number** | **Emissions Unit** | **Description of Source**
--- | --- | ---
1004 | 178 | Paint Spray Booth

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Paint Spray Booth, including following equipment:

One 42 in. X 36 in. Paint spray booth (Main shop) (MEC-TL-101) with 1-hp blower and four 20 in x 20 in. filter pads.

**OPERATIONAL CONDITIONS:**

1. Particulate emissions shall be no more than 0.1 gr/scf. (Rule 404.1)
2. Visible emissions shall not equal or exceed 20% opacity or Ringelmann No. 1 for more than three minutes in any one hour. (Rule 401)
3. Painting operation shall comply with all applicable requirements of Rule 410.4 and/or Rule 410.4 A.
4. Should facility-wide VOC emissions from coating of metal parts and products be less than 15 lb/day on each day, operator is exempt from requirements of Rule 410.4. Operator shall maintain records necessary to verify compliance with this exemption. (Rule 410.4)
5. Spray booth shall be used when coating objects which can be contained within spray booth. (Rule 209)
6. Coating of Motor Vehicles and Mobile Equipment (Rule 410.4A)
   a. Except as provided below, no person shall refinish, or spot/panel repair any car, truck, van, or motorcycle, or where color match is required, any bus, mobile equipment, or parts and components of such vehicles or equipment, using coating with VOC content in excess of following limits as applied:

   **VOC Content Limits**

   **(Grams of VOC Per Liter of Coating Less Water and Less Exempt Compounds)**

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   b. Except as provided above, where color match is not required, no person shall refinish or spot/panel repair any bus, or mobile equipment, or parts and components of such vehicle or equipment using coating with VOC content in excess of following limits as applied:
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7. Coating of Metal Parts and Products (Rule 410.4)
   No person shall coat any metal part or product excluding those motor vehicles and mobile equipment covered by Rule 410.4A, with VOC content in excess of following limits as applied.
   a. All coating except those in b., following, 340 g/l (2.8 lb/gal); and
   b. Camouflage, Extreme Performance, Heat Resistant, High Gloss High Performances Architectural, High Temperature, Metallic Topcoat, Silicone Release, and Solar Absorbent Coatings shall not exceed 420 g/l (3.5 lb/gal.).

8. HVLP spray guns shall be operated with air pressure at gun of between 0.1 and 10 psig. and with fluid pressure of no more than 50 psig. (Rules 410.4 and 410.4A)

9. Exhaust filters shall be replaced per manufacturer's recommendations to achieve optimum capture as indicated by differential pressure across filters. (Rule 209)

10. Application Equipment Requirements (Rules 410.4 and 410.4A):
    No person shall coat metal parts and products or any vehicle, or mobile equipment, or parts and components of such vehicles and equipment, unless one of following methods is used:
    a. Brush, dip, or roll coating conducted in accordance with manufacturer's recommendations;
    b. Electrostatic or electrodeposition application conducted in accordance with manufacturer's recommendations;
    c. High Volume Low Pressure (HVLP) spray equipment operated in accordance with manufacturer's recommendations; or
    d. Non-refillable aerosols may only be used to repair minor surface damage and imperfections, provided area to be covered does not exceed 9 square feet.

11. Surface Preparation and Equipment Cleanup Requirements (Rules 410.4 and 410.4A):
    No person shall conduct surface preparation or equipment cleanup for activities subject to provisions of this Rule unless following VOC limits are met and methods are used:
    a. Surface Cleaning: No material shall be used containing VOC in excess of 200 grams per liter (1.7 lb/gal) of material to remove dirt, oils, or other contaminants prior to application of surface coatings or adhesives;
    b. Stripping: No material shall be used containing VOC in excess of 200 grams per liter of material to strip any coating;
    c. Cleaning of Coatings Application Equipment: Solvents used for cleaning of coatings application equipment shall comply with both limits specified below:
       1) Solvent shall have VOC content of 950 grams or less per liter (7.9 lb/gal) of material; and
       2) Solvent shall have VOC composite partial pressure of 35 mm Hg or less at 20°C (68°F).
d. Cleaning Devices and Methods Requirements: No person shall perform solvent cleaning operations unless one of the following cleaning devices or methods is used:
1) Wipe cleaning;
2) Spray bottles or containers with maximum capacity of 16 fluid ounces from which solvents are applied without propellant-induced force;
3) Cleaning equipment having closed solvent container during cleaning operations, except when depositing and removing objects to be cleaned, and closed during non-operation except during maintenance and repair of cleaning equipment itself;
4) Remote reservoir cold cleaner operated 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 container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container; or
7) Solvent flushing method discharging cleaning solvent into container closed 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 into containers without atomizing into open air. Solvent may be flushed through system by air or hydraulic pressure, or by pumping.

12. Storage and Disposal: Regardless of VOC content, all VOC-containing materials used in solvent cleaning operations, such as solvents, and cloth and paper moistened with solvents, shall be stored in non-absorbent, non-leaking containers kept closed at all times except when filling or emptying. (Rules 410.4 and 410.4A)

13. Record Keeping Requirements (Rules 410.4 and 410.4A)
   a. Current list of VOC containing products in use containing all data necessary to evaluate compliance, including following information, as applicable:
      1) Material name and manufacturer's identification;
      2) Application method;
      3) Material type and specific use instructions, for example, "single stage topcoat" or "precoat shall be applied to bare metal and followed with compliant primer";
      4) Specific mixing instructions;
      5) Maximum VOC content of coating as applied, including thinning solvents, hardeners, etc., excluding water and exempt compounds; and
      6) Coating composition and density.
   b. Daily job, coating, and solvent use records, including following information:
      1) Type of vehicle, equipment, part or component coated;
      2) Application method (HVLP, brush, rag, aerosol, etc.);
      3) Specific coatings used on each job, e.g. pretreatment wash primer, precoat, topcoat;
      4) Volume in gallons (or liters) of each component and mix ratio;
      5) VOC content in pounds/gallon (or grams/liter) as applied/used;
      6) Specific solvents used;
      7) Volume of each solvent used in gallons (or liters); and
      8) Primers and primer surfacers mixed for use on multiple units may be recorded as single line item provided quantity and VOC content are recorded.
U.S. Borax Inc. Version 2011

Emission Unit 178 Permit Conditions

c. Purchase records showing date, type, and amount of VOC containing material shall be maintained and be made available to District personnel upon request. (Rules 410.4 and 410.4A)
d. All records shall be maintained for five years and made available for inspection by Control Officer upon request. (Rules 410.4 and 410.4A)

14. Coatings containing chromium compounds (examples, Zinc Chromate, Strontium Chromate, and Barium Chromate) shall not be spray applied. Roll, dip, or brush applications may be used. (Rule 419)

15. Operation shall not cause nuisance to nearby receptors. (Rule 419)

16. Touch-up, primers, primer surfacers, and pre-coats may be applied outside of spray booth provided total surface covered does not exceed 9 square feet per vehicle and provided coating does not contain lead or chromium compounds. All other coatings shall be applied within operations spray booth. (Rule 410.4A)
Emission Unit 179 Permit Conditions

<table>
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<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
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<tbody>
<tr>
<td>1004</td>
<td>179</td>
<td>Paint Spray Booth</td>
</tr>
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**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Paint Spray Booth, including following equipment:

26 f. x 14 ft. x 9 ft. paint spray booth (Utility shop) with 5-hp blower and twenty 18 in. X 18 in. Filter pads.

**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. Painting operation shall comply with all applicable requirements of Rule 410.4 and/or Rule 410.4 A.
4. Should facility-wide VOC emissions from coating of metal parts and products be less than 15 lb/day on each day, operator is exempt from requirements of Rule 410.4.
5. Spray booth shall be used when coating objects that can be contained within spray booth. (Rule 209)
6. Coating of Motor Vehicles and Mobile Equipment (Rule 410.4A)
   a. Except as provided below, no person shall refinish, or spot/panel repair any car, truck, van, or motorcycle, or where color match is required, any bus, mobile equipment, or parts and components of such vehicles or equipment, using coating with VOC content in excess of following limits as applied:

**VOC Content Limits**

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b. Except as provided above, where color match is not required, no person shall refinish or spot/panel repair any bus, or mobile equipment, or parts and components of such vehicle or equipment using coating with VOC content in excess of following limits as applied:
Emission Unit 179 Permit Conditions

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7. Coating of Metal Parts and Products (Rule 410.4)
   No person shall coat any metal part or product excluding those motor vehicles and mobile equipment covered by Rule 410.4A, with VOC content in excess of following limits as applied.
   a. All coating except those in b., following, 340 g/l (2.8 lb/gal); and
   b. Camouflage, Extreme Performance, Heat Resistant, High Gloss High Performances Architectural, High Temperature, Metallic Topcoat, Silicone Release, and Solar Absorbent Coatings shall not exceed 420 g/l (3.5 lb/gal.).

8. HVLP spray guns shall be operated with air pressure at gun of between 0.1 and 10 psig and with fluid pressure of no more than 50 psig. (Rules 410.4 and 410.4A)

9. All coatings shall be applied within fully operational spray booth. (Rule 210.1)

10. Exhaust filters shall be replaced per manufacturer's recommendations to achieve optimum capture as indicated by differential pressure across filters. (Rule 210.1)

11. Application Equipment Requirements (Rules 410.4 and 410.4A):
   No person shall coat metal parts and products or any vehicle, or mobile equipment, or parts and components of such vehicles and equipment, unless one of following methods is used:
   a. Brush, dip, or roll coating conducted in accordance with manufacturer's recommendations;
   b. Electrostatic or electrodeposition application conducted in accordance with manufacturer's recommendations;
   c. High Volume Low Pressure (HVLP) spray equipment operated in accordance with manufacturer's recommendations; or
   d. Non-refillable aerosols may only be used to repair minor surface damage and imperfections, provided area to be covered does not exceed 9 square feet. 

12. Surface Preparation and Equipment Cleanup Requirements (Rules 410.4 and 410.4A):
   No person shall conduct surface preparation or equipment cleanup for activities subject to provisions of this Rule unless following VOC limits are met and methods are used:
   a. Surface Cleaning: No material shall be used containing VOC in excess of 200 grams per liter (1.7 lb/gal) of material to remove dirt, oils, or other contaminants prior to application of surface coatings or adhesives;
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3) Cleaning equipment having 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 cleaning equipment itself;
4) Remote reservoir cold cleaner operated 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 container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container; or
7) Solvent flushing method discharging cleaning solvent into container closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. Discharged solvent from such equipment shall be collected into containers without atomizing into open air. Solvent may be flushed through system by air or hydraulic pressure, or by pumping.

Storage and Disposal: Regardless of VOC content, all VOC-containing materials used in solvent cleaning operations, such as solvents, and cloth and paper moistened with solvents, shall be stored in non-absorbent, non-leaking containers kept closed at all times except when filling or emptying. (Rules 410.4 and 410.4A)

Record Keeping Requirements (Rules 410.4 and 410.4A)

a. Current list of VOC containing products in use containing all data necessary to evaluate compliance, including following information, as applicable:
   1) Material name and manufacturer's identification;
   2) Application method;
   3) Material type and specific use instructions, for example, "single stage topcoat" or "precoat shall be applied to bare metal and followed with compliant primer";
   4) Specific mixing instructions;
   5) Maximum VOC content of coating as applied, including thinning solvents, hardeners, etc., excluding water and exempt compounds; and
   6) Coating composition and density.

b. Daily job, coating, and solvent use records, including following information:
   1) Type of vehicle, equipment, part or component coated;
   2) Application method (HVLP, brush, rag, aerosol, etc.);
   3) Specific coatings used on each job, e.g. pretreatment wash primer, precoat, topcoat;
   4) Volume in gallons (or liters) of each component and mix ratio;
   5) VOC content in pounds/gallon (or grams/liter) as applied/used;
   6) Specific solvents used;
   7) Volume of each solvent used in gallons (or liters); and
   8) Primers and primer surfacers mixed for use on multiple units may be recorded as single line item provided quantity and VOC content are recorded.
Emission Unit 179 Permit Conditions

  c. Purchase records showing date, type, and amount of VOC containing material shall be maintained and be made available to District personnel upon request. (Rules 410.4 and 410.4A)
  d. All records shall be maintained for five years and made available for inspection by Control Officer upon request. (Rules 410.4 and 410.4A)

15. Coatings containing chromium compounds (examples, Zinc Chromate, Strontium Chromate, and Barium Chromate) shall not be spray applied. Roll, dip, or brush applications may be used. (Rule 419)

16. Operation shall not cause nuisance to nearby receptors. (Rule 419)

17. Touch-up, primers, primer surfacers, and precoats may be applied outside of spray booth provided total surface covered does not exceed 9 square feet per vehicle and provided coating does not contain lead or chromium compounds. All other coatings shall be applied within operations spray booth. (Rule 410.4A)
Emission Unit 180 Permit Conditions

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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. ARB 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 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

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>182</td>
<td>Bulk Storage Facility (Dome #1 West)</td>
</tr>
</tbody>
</table>

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 1004183A);
   2. Dome feed belt (HB-3) 30 hp motor;
   3. Dome reclaim belt (HP-5) 50 hp motor (shared with PTO 1004183A);
   4. North transfer belt (HP-6) 20 hp motor (shared with PTO 1004183A);
   5. West transfer belt (HP-7) 25 hp motor (shared with PTO 1004183A);
   6. Rotex screen;
   7. Dome reclaim to high speed loadout belt (HB-8) 25 hp motor (shared with PTO 1004183A); and
   8. Dome feed and dome reclaim weight scales (W-2 and W-3) (shared with PTO 1004183A).

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 1004183A);
   2. Dome reclaim 75 hp dust collector fan (F-3) (shared with PTO 1004183A);
   3. Dome #1 dust collector fan (F-4) 2 hp;
   4. (F-6) (shared with PTO 1004183A); and
   5. Dome reclaim 50 hp (F-8) (shared with PTO 1004183A) 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 1004183A);
   3. Dome reclaim dust collector (DC-4) 16285 cfm (shared with PTO 1004183A); and
   4. Dome #1 dust collector (DC-5) 1500 cfm.
U.S. Borax Inc. Version 2011

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 less 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 (PM\textsubscript{10}):** 0.02 gr/scf

<table>
<thead>
<tr>
<th>Source</th>
<th>Emission Rate (lb/hr of PM\textsubscript{10})</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC-3</td>
<td>0.13</td>
</tr>
<tr>
<td>DC-2 or DC-4</td>
<td>0.08</td>
</tr>
<tr>
<td>DC-5 or DC-6</td>
<td>0.07</td>
</tr>
</tbody>
</table>

- **During Dome Filling:**
  - Total from DC-3 and DC-5: 4.80 lbm/day (of PM\textsubscript{10})
  - Total from DC-3, DC-5, and DC-6: 6.40 lbm/day (of PM\textsubscript{10})

- **When Reclaiming:** 3.64 lbm/day (of PM\textsubscript{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 five years. (Rules 209 and 210.1)
Emission Unit 183 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>183</td>
<td>Bulk Storage Facility (Dome #2 East)</td>
</tr>
</tbody>
</table>

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 1004182A);
   2. Dome feed belt (HB-4) 30 hp motor;
   3. Dome reclaim belt (HP-5) 50 hp motor (shared with PTO 1004182A);
   4. North transfer belt (HP-6) 20 hp motor (shared with PTO 1004182A);
   5. West transfer belt (HP-7) 25 hp motor (shared with PTO 1004182A);
   6. Rotex screen;
   7. Dome reclaim to high speed loadout belt (HB-8) 25 hp motor (shared with PTO 1004182A);
   8. Dome feed and dome reclaim weight scales (W-2 and W-3) (shared with PTO 1004182A).

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 1004182A);
   5. Dome #2 selector gate (MG-7); and
   6. Railcar diverter slide gate (MG-8) (shared with 1004182A).

D. Fans:
   1. Dome feed 40-hp dust collector fan (F-2) serving DC-3 (shared with 1004182A);
   2. Dome reclaim 75-hp dust collector fan (F-3) (shared with 1004182A);
   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 1004182A).

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 1004182A);
   2. Dome feed dust collector (DC-3) 7974 cfm (shared with 1004182A);
   3. Dome reclaim dust collector (DC-4) 16285 cfm (shared with 1004182A); 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 1004182A);
   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 1004182A).

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 1004182A).

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 less 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:
U.S. Borax Inc. Version 2011

Emission Unit 183 Permit Conditions

**Particulate Matter (PM$_{10}$):** 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$_{10}$)

_Several emission limits are listed, including:

- 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 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 185 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>185</td>
<td>Industrial Vacuum System</td>
</tr>
</tbody>
</table>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Industrial Vacuum System, including following equipment:

- 30 hp HiVac 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

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>186</td>
<td>Industrial Vacuum System</td>
</tr>
</tbody>
</table>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Industrial Vacuum System, including following equipment:

30 hp HiVac 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 187 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>187</td>
<td>Industrial Vacuum System</td>
</tr>
</tbody>
</table>

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Industrial Vacuum System, including following equipment:

30 hp HiVac 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

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>188</td>
<td>Industrial Vacuum System</td>
</tr>
</tbody>
</table>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:**  Industrial Vacuum System, including following equipment:

30 hp HiVac 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)
Facility Number 1004

Emissions Unit 189

Description of Source Industrial Vacuum System

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Industrial Vacuum System, including following equipment:

30 hp HiVac 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 190 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>190</td>
<td>Industrial Vacuum System</td>
</tr>
</tbody>
</table>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Industrial Vacuum System, including following equipment:

- 30 hp HiVac 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 191 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
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<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>191</td>
<td>Industrial Vacuum System</td>
</tr>
</tbody>
</table>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Industrial Vacuum System, including following equipment:

30 hp HiVac 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 192 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>192</td>
<td>Industrial Vacuum System</td>
</tr>
</tbody>
</table>

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Industrial Vacuum System, including following equipment:

30 hp HiVac 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 Equipment Description/Permit Conditions

Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:**  Truck-Mounted Vacuum, including following equipment:

250 bhp Guzzler diesel engine with vacuum rated 1,000-2,000 acfm.

**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 Equipment Description/Permit Conditions

Federally Enforceable Conditions

EFFECTIVE DATE: Effective immediately.

OPERATIONAL CONDITIONS:

1. Particulate matter emissions from sweeper collector exhaust shall not exceed 0.01-gr/scf. (Rule 210.1)
2. Sweeper collector shall have no visible emissions other than water vapor. (Rule 210.1)
3. Sweeper collector shall be in operation when associated equipment is operated. (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 sweeper collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
6. Equipment shall be maintained according to 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 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 public. (Rule 419 and CH&SC, Sec 41700)
9. Sweeper operation shall not exceed 2900 hours per year without prior District Approval. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 45 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:
Emission Unit 196 Permit Conditions

**Particulate Matter (PM\textsubscript{10}):**

- 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.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 209 and 210.1)
Emission Unit 198 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>198</td>
<td>Sweeper</td>
</tr>
</tbody>
</table>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:**  Sweeper, including following equipment:

Tennant Model 355 mobile sweeper.

**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

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>205</td>
<td>Flocculent Feed Tank with Bin Vent Dust Collector</td>
</tr>
</tbody>
</table>

**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 40 CFR Part 60, Subpart OOO)

**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:**
  - 0.02 gr/scf
  - 0.06 lb/hr (of PM$_{10}$)
  - 0.12 lb/day (of PM$_{10}$)

(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 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, 210.1, and 201.1)
Emission Unit 206 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>206</td>
<td>Ore/Borax Pond Reprocessing Facility</td>
</tr>
</tbody>
</table>

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Ore/Borax Pond Reprocessing Facility, including following equipment:

- A. Primary crusher;
- B. Two vibrating screens;
- C. Cone crusher, 250-hp;
- D. Four screens;
- E. Feed bin system - 10 bins for #4 x #10 feed material magnetic separators and 14 for #10 x #70 feed material magnetic separators;
- F. 24 Magnetic separators including feeders, 10 for #4 x #10 feed material and 14 for #10 x #70 feed material;
- G. Five fabric dust collectors - two fixed, 100-hp, 25,000 cfm and five insertable with 20-hp, 1,250 cfm;
- H. 16 - 24 in. wide belt conveyors ranging from 7.5 - 20-hp, associated with various operations;
- I. Miscellaneous support equipment including air compressors, air receivers, air dryers, air filters, belt scales, belt cranes, air locks, hoppers, and feeders; and
- J. One product, one waste agglomerator, product and waste storage piles.

**OPERATIONAL CONDITIONS:**

1. 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)
2. Dust collectors shall be equipped with operational pressure differential indicators. (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. Fabric dust collectors shall be in operation when associated equipment is operated. (Rule 210.1)
7. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 209)
8. Process weight rate shall not exceed 1,848 tons per day 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)
Emission Unit 206 Permit Conditions

EMISSION LIMITS:

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

**Particulate Matter:**

- 0.02 gr/dscf (of PM) (Rule 422)
- 0.38 lb/hr (of PM\(_{10}\))
- 9.12 lb/day (of PM\(_{10}\))

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 209, 210.1, and 201.1)
Emission Unit 207 Permit Conditions

**Facility Number** | **Emissions Unit** | **Description of Source**
--- | --- | ---
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):**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>lb/day</td>
<td>68.49</td>
</tr>
<tr>
<td>ton/yr</td>
<td>12.50</td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>208</td>
<td>On-Site Landfill Operation</td>
</tr>
</tbody>
</table>

**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 Eastern Kern APCD PM$_{10}$ 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 211 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>211</td>
<td>Ammonium Nitrate Storage Unloading Operation #1</td>
</tr>
</tbody>
</table>

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Ammonium Nitrate Storage Unloading Operation #1, including following equipment:

A. 10,500-gallon ammonium nitrate storage tank equipped with bin vent filter (DRL-BN-621);
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 212 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>212</td>
<td>Ammonium Nitrate Storage Unloading Operation #2</td>
</tr>
</tbody>
</table>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Ammonium Nitrate Storage Unloading Operation #2, including following equipment:

A. 10,500-gallon (75 Ton) ammonium nitrate storage tank equipped with bin vent filter;
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 213 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>213</td>
<td>Ammonium Nitrate Storage Unloading Operation #3</td>
</tr>
</tbody>
</table>

**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 Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Ammonium Nitrate Storage Unloading Operation #4, including following equipment:

A. 14,000-gallon (100 ton) ammonium nitrate storage tank equipped with bin vent filter;
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

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emission Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>222</td>
<td>Boric Acid Dryer No. 4</td>
</tr>
</tbody>
</table>

**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 20-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) with 4 collection banks, 5,424-sq.ft. of filtering area, and exhaust fan with 250-hp motor serving fabric collector and wet scrubber (item H);
- 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. 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 0.01-gr/scf. (Rule 210.1 BACT Requirement)
5. Visible emissions from fabric collector/wet scrubber shall not exceed 5% opacity (¼ Ringelmann), excluding water vapor. (Rule 210.1 BACT Requirement)
6. Fabric dust collector volumetric exhaust flow rate shall not exceed 20,000 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. All conveyors transporting dried material shall be covered be leak-tight, have no visible emissions. (Rule 210.1)
10. Material collected in fabric dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
11. Boric acid added to emergency dump pad shall be recycled or disposed of prior to drying. (Rule 210.1 BACT Requirement)
Emission Unit 222 Permit Conditions

12. Dryer burners shall be fired exclusively with public utility commission regulated quality natural gas. (Rule 210.1 BACT Requirement)
13. No more than 103.1-MMscf/year of natural gas shall be burned as fuel. (Rule 210.1)
14. Operator shall maintain annual records of fuel use. (Rule 210.1)
15. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
16. 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)
17. 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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

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. NOx 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. NOx 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 SOx 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:

<table>
<thead>
<tr>
<th>Particulate Matter (PM₁₀)</th>
<th>0.01 grains/scf</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.17 lb/hr</td>
</tr>
<tr>
<td></td>
<td>52.15 lb/day</td>
</tr>
<tr>
<td></td>
<td>9.52 ton/yr</td>
</tr>
</tbody>
</table>
Emission Unit 222 Permit Conditions

**Sulfur Oxides (SO\textsubscript{2}):**
- 0.01 lb/hr
- 0.02 lb/day
- 0.00 ton/yr

**Oxides of Nitrogen (NO\textsubscript{2}):**
- 0.14 lb/hr
- 3.46 lb/day
- 0.63 ton/yr

**Volatile Organic Compounds (VOC):**
- 0.06 lb/hr
- 1.55 lb/day
- 0.28 ton/yr

(as defined in Rule 210.1)

**Carbon Monoxide:**
- 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 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 223 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emission Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>223</td>
<td>Granubor II Production Operation</td>
</tr>
</tbody>
</table>

#### 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-aefm 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-002 and GRB-DC-003) for GRB-DC-232 and 233;
Emission Unit 223 Permit Conditions

HH. Silo No.3 discharge screw feeder (BLK-SC-003), 24” dia. with 15-hp motor;
II. Bin vent dust collector (BLK-DC-300) with 175-acfm fan (BLK-FN-300) with 1.5-hp motor for silo No. 3.

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 and 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. 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)
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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 45 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.S. Borax Inc. Version 2011

Emission Unit 223 Permit Conditions

**Particulate Matter (PM$_{10}$):**

<table>
<thead>
<tr>
<th>Collector</th>
<th>Emission Limit</th>
<th>Unit Type</th>
<th>Emission Limit</th>
<th>Unit Type</th>
<th>Emission Limit</th>
<th>Unit Type</th>
<th>Emission Limit</th>
<th>Unit Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabric Collector (GRB-DC-001)</td>
<td>0.01 gr/scf (Rule 210.1 BACT Requirement)</td>
<td></td>
<td>0.51 lb/hr</td>
<td></td>
<td>12.34 lb/day</td>
<td></td>
<td>2.25 ton/yr</td>
<td></td>
</tr>
<tr>
<td>Fabric Collector (GRB-DC-002)</td>
<td>0.01 gr/scf</td>
<td></td>
<td>0.001 lb/hr</td>
<td></td>
<td>0.01 lb/day</td>
<td></td>
<td>0.002 ton/yr</td>
<td></td>
</tr>
<tr>
<td>Fabric Collector (GRB-DC-003)</td>
<td>0.01 gr/scf</td>
<td></td>
<td>0.001 lb/hr</td>
<td></td>
<td>0.01 lb/day</td>
<td></td>
<td>0.002 ton/yr</td>
<td></td>
</tr>
<tr>
<td>Fabric Collector (BLK-DC-300)</td>
<td>0.01 gr/scf (175 scfm)</td>
<td></td>
<td>0.01 lb/hr</td>
<td></td>
<td>0.36 lb/day</td>
<td></td>
<td>0.07 ton/yr</td>
<td></td>
</tr>
</tbody>
</table>

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

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 209 and 210.1)
Emission Unit 228 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>228</td>
<td>Pump Driven by Piston Engine (Equipment No. 98107)</td>
</tr>
</tbody>
</table>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Piston Engine with Pump, including following equipment:

Pump driven by 225-Bhp diesel fueled piston engine.

**OPERATIONAL CONDITIONS:**

1. Engine crankcase vent shall be equipped with positive ventilation system or 90% efficient control device for crankcase VOC emissions. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with turbocharger. (Rule 210.1)
3. An elapsed time meter shall be installed and maintained indicating in cumulative hours amount of engine operating time. (Rule 210.1)
4. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not exceed 5% opacity or Ringelmann No. ¼ for more than 3 minutes in any one-hour. (Rule 210.1)
5. Exhaust gas particulate matter concentration shall not exceed 0.1 grain/ft³ of gas at standard conditions. (Rule 404.1)
6. 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)
7. Equipment shall be maintained according to manufacturer’s specifications to ensure compliance with emissions limitations. (Rules 210.1 and Rule 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 readily available format. (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 and CH&SC Sec 41700)
10. Engine operation shall not exceed 750 hours per year without prior District approval. (Rule 210.1)

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

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)
Emission Unit 228 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 District within 45 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 (PM$_{10}$) | 0.14 gm/bhp-hr |
| Sulfur Oxides (SO$_2$) | 0.09 lb/hr |
| Oxides of Nitrogen (NO$_2$) | 5.23 gm/bhp-hr |
| Volatile Organic Compounds (VOC) | 0.13 lb/hr |
| Carbon Monoxide | 0.20 lb/hr |

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

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 209 and 210.1)
Emission Unit 229 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>229</td>
<td>Pump Driven by Piston Engine (Equipment No. 98106)</td>
</tr>
</tbody>
</table>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Piston Engine with Pump, including following equipment:

Pump driven by 225-Bhp diesel fueled piston engine.

**OPERATIONAL CONDITIONS:**

1. Engine crankcase vent shall be equipped with positive ventilation system or 90% efficient control device for crankcase VOC emissions. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with turbocharger. (Rule 210.1)
3. An elapsed time meter shall be installed and maintained indicating in cumulative hours amount of engine operating time. (Rule 210.1)
4. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not exceed 5% opacity or Ringelmann No. ¼ for more than 3 minutes in any one-hour. (Rule 210.1)
5. Exhaust gas particulate matter concentration shall not exceed 0.1 grain/ft³ of gas at standard conditions. (Rule 404.1)
6. 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)
7. Equipment shall be maintained according to manufacturer’s specifications to ensure compliance with emissions limitations. (Rules 210.1 and Rule 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 readily available format. (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 and CH&SC Sec 41700)
10. Engine operation shall not exceed 750 hours per year without prior District approval. (Rule 210.1)

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

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)
Emission Unit 229 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 District within 45 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:

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Particulate Matter (PM$_{10}$):</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.14 gm/bhp-hr</td>
</tr>
<tr>
<td></td>
<td>0.07 lb/hr</td>
</tr>
<tr>
<td></td>
<td>0.83 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.03 ton/yr</td>
</tr>
<tr>
<td><strong>Sulfur Oxides (SO$_2$):</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.09 lb/hr</td>
</tr>
<tr>
<td></td>
<td>1.08 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.03 ton/yr</td>
</tr>
<tr>
<td><strong>Oxides of Nitrogen (NO$_2$):</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.23 gm/bhp-hr</td>
</tr>
<tr>
<td></td>
<td>4.76 lb/hr</td>
</tr>
<tr>
<td></td>
<td>31.43 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.98 ton/yr</td>
</tr>
<tr>
<td><strong>Volatile Organic Compounds (VOC):</strong></td>
<td></td>
</tr>
<tr>
<td>(as defined in Rule 210.1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.13 lb/hr</td>
</tr>
<tr>
<td></td>
<td>1.61 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.05 ton/yr</td>
</tr>
<tr>
<td><strong>Carbon Monoxide:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.20 lb/hr</td>
</tr>
<tr>
<td></td>
<td>2.44 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.08 ton/yr</td>
</tr>
</tbody>
</table>

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

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

EQUIPMENT DESCRIPTION: Sweeper, including following equipment:

Sweeper driven with 50-Bhp diesel fueled piston engine.

OPERATIONAL CONDITIONS:

1. Sweeper collector shall have no visible emissions other than water vapor. (Rule 210.1)
2. Sweeper collector shall be in operation when associated equipment is operated. (Rule 210.1)
3. All piping, ducting, hatches, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
4. Material collected in sweeper collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
5. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
6. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
7. 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)
8. Sweeper operation shall not exceed 2900 hours per year without prior District Approval. (Rule 210.1)
9. Exhaust gas particulate matter concentration shall not exceed 0.01-gr/scf. (Rule 404.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 45 days after test completion. (Rule 108.1 and 210.1)
U.S. Borax Inc. Version 2011

Emission Unit 233 Permit Conditions

**EMISSION LIMITS:**

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

**Particulate Matter (PM$_{10}$):**

- 0.12 lb/hr
- 0.94 lb/day
- 0.17 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 five years. (Rules 209 and 210.1)
Emission Unit 267 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>267</td>
<td>Stand-by Secondary Crushing Unit</td>
</tr>
</tbody>
</table>

Emission Unit Equipment Description/Permit Conditions

**Federally Enforceable Conditions**

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

A. Tunnel belt conveyor (DIS-BC-033) with 60-hp motor,
B. Fines belt conveyor (DIS-BC-001) with 25-hp motor,
C. Oversize belt conveyor (DIS-BC-002) with 15-hp motor,
D. East crusher discharge belt conveyor (DIS-BC-117) with 5-hp motor,
E. West crusher discharge belt conveyor (DIS-BC-119) with 5-hp motor,
F. South transfer belt from stamler (DIS-BC-099) with 30-hp motor,
G. Discharge belt (DIS-BC-100) with 30-hp motor,
H. West screen (DIS-SN-036) with 7.5-hp motor,
I. East screen (DIS-SN-037) with 7.5-hp motor,
J. Emergency feeder/crusher (ORS-ML-001 and ORS-HP-001) with motors totaling 300-hp,
K. 2 - Screw conveyors to dust hopper (DIS-SC-001 and DIS-SC-146)
L. 2 - Enclosed auger dust conveyors (DIS-SC-015 and DIS-SC-019) with motors totaling 6-hp,
M. East section crusher (DIS-ML-001) with motors totaling 300-hp
N. West section crusher (DIS-ML-029) with motors totaling 300-hp
O. Fabric collector (DIS-DC-004)
P. Fabric collector (DIS-DC-003)
Q. Metal detector and magnet (DIS-MD-008 and DIS-MD-001)
R. 16,190 cfm blower (DIS-FN-001) serving fabric collector (DIS-SC-004) with 75-hp motor,
S. 6,300 cfm blower (DIS-FN-003) serving fabric collector (DIS-SC-003) with 25-hp motor,
T. Bucket elevator (DIS-EL-148) with emergency stand-by cyclone [DIS-DC-010] (not in service);

**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 conveyors shall be equipped with dust-tight cover. (Rule 210.1)
4. There shall be no visible emissions from fabric collector and conveyors. (Rule 210.1)
5. Primary secondary crusher (PTO No. 1004002) and this permit unit shall not operate simultaneously. (Rule 210.1)
6. 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)
7. Screw conveyors shall discharge collected dust only to either incline belt conveyor. (Rule 209)
8. Fabric collectors shall be maintained in proper working order. (Rule 209)
9. Process shall not be operated unless emission control equipment is in operation. (Rules 210.1 and 209)
Emission Unit 267 Permit Conditions

10. Material removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)

11. All material transfer points and storage bins shall be vented to dust collector. (Rule 209)

12. There shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)

13. Screen covers shall always be in place during operation. (Rule 210.1)

14. All exhaust ducts shall be connected to appropriate collection equipment. (Rule 210.1)

15. Free moisture content of ore shall be maintained at no less than 3% by weight. (Rule 401)

16. Collected dust dump hopper shall be maintained dust-tight. (Rule 210.1)

17. Ductwork connecting material drop points and ore storage bins shall be maintained in air-tight condition. (Rule 210.1)

18. 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)

19. Vacuum system shall be operated with collection bags having no tears or similar damage. (Rule 210.1)

20. Process weight rate shall not exceed 1,000 tons per hour without prior District approval. (Rule 210.1)

21. Stand-by secondary crushing unit operation shall not exceed 2000 hours/year without prior District approval. (Rule 210.1)

22. 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)

23. Exhaust gas particulate matter concentration shall not exceed 0.02 gr/scf. (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 45 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 (PM\(_{10}\))**:

- **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

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)
Emission Unit 267 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 five years. (Rules 209 and 210.1)

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

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)
Emission Unit 268 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>268</td>
<td>BagRejecter</td>
</tr>
</tbody>
</table>

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Bag Rejecter, including following equipment:

A. Bag Splitter model TBS 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)

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

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

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 45 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):**

- 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 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)
Facility Number 1004

Emission Unit 273 Permit Conditions

Facility Number 1004

Emission Unit 273

Description of Source Portable Compressor

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Portable Compressor, including following equipment:

195-cfm portable compressor driven by 60-bhp diesel fueled piston engine.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with crankcase ventilation exhausting 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 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/ft$^3$ 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 shall not exceed 500 hours per year without prior District approval. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

201
Emission Unit 273 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 45 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:

<table>
<thead>
<tr>
<th></th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Particulate Matter (PM$_{10}$):</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.3 gm/bhp-hr</td>
</tr>
<tr>
<td></td>
<td>0.04 lb/hr</td>
</tr>
<tr>
<td></td>
<td>0.95 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.01 ton/yr</td>
</tr>
<tr>
<td><strong>Sulfur Oxides (SO$_x$ as SO$_2$):</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.001 lb/hr</td>
</tr>
<tr>
<td></td>
<td>0.02 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.0002 ton/yr</td>
</tr>
<tr>
<td><strong>Oxides of Nitrogen (NO$_x$ as NO$_2$):</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.9 gm/bhp-hr</td>
</tr>
<tr>
<td></td>
<td>0.91 lb/hr</td>
</tr>
<tr>
<td></td>
<td>21.91 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.23 ton/yr</td>
</tr>
<tr>
<td><strong>Volatile Organic Compounds (VOC):</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.11 lb/hr</td>
</tr>
<tr>
<td></td>
<td>2.54 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.03 ton/yr</td>
</tr>
</tbody>
</table>

(as defined in Rule 210.1)

| **Carbon Monoxide:**         | Unit          |
|                            |               |
|                            | 0.49 lb/hr    |
|                            | 11.75 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 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 275 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>275</td>
<td>Emergency Generator</td>
</tr>
</tbody>
</table>

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** 250-kW Emergency Generator Driven by 398-bhp (297-kW) Diesel Piston Engine, 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)

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

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)
Emission Unit 275 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 45 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 (PM$_{10}$):**
  - 0.15 gm/bhp-hr
  - 0.13 lb/hr
  - 3.16 lb/day
  - 0.01 ton/yr

- **Sulfur Oxides (Sox as SO$_2$):**
  - 0.004 lb/hr
  - 0.107 lb/day
  - 0.0004 ton/yr

- **Oxides of Nitrogen (Nox as NO$_2$):**
  - 2.8 gm/bhp-hr
  - 2.46 lb/hr
  - 58.98 lb/day
  - 0.25 ton/yr

- **Volatile Organic Compounds (VOC):**
  - 0.2 gm/bhp-hr
  - 0.18 lb/hr
  - 4.21 lb/day
  - 0.02 ton/yr

- **Carbon Monoxide:**
  - 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 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 276 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>276</td>
<td>Emergency Generator With Diesel Piston Engine</td>
</tr>
</tbody>
</table>

**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)

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

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)
Emission Unit 276 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 45 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:

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Particulate Matter (PM_{10})</strong></td>
<td>0.15 gm/bhp-hr</td>
</tr>
<tr>
<td></td>
<td>0.07 lb/hr</td>
</tr>
<tr>
<td></td>
<td>1.72 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.01 ton/yr</td>
</tr>
<tr>
<td><strong>Sulfur Oxides (SO_x as SO_2)</strong></td>
<td>0.002 lb/hr</td>
</tr>
<tr>
<td></td>
<td>0.06 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.0002 ton/yr</td>
</tr>
<tr>
<td><strong>Oxides of Nitrogen (NO_x as NO_2)</strong></td>
<td>2.8 gm/bhp-hr</td>
</tr>
<tr>
<td></td>
<td>1.34 lb/hr</td>
</tr>
<tr>
<td></td>
<td>32.15 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.13 ton/yr</td>
</tr>
<tr>
<td><strong>Volatile Organic Compounds (VOC)</strong></td>
<td>0.2 gm/bhp-hr</td>
</tr>
<tr>
<td>(as defined in Rule 210.1)</td>
<td>0.10 lb/hr</td>
</tr>
<tr>
<td></td>
<td>2.30 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.01 ton/yr</td>
</tr>
<tr>
<td><strong>Carbon Monoxide</strong></td>
<td>1.24 lb/hr</td>
</tr>
<tr>
<td></td>
<td>29.86 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.12 ton/yr</td>
</tr>
</tbody>
</table>

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

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 209 and 210.1)
Emission Unit 277 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>277</td>
<td>Emergency Generator With Diesel Piston Engine</td>
</tr>
</tbody>
</table>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

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

1600-cfm Compressor (Eq. No. 9807), driven by 450-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. Diesel particulate filter shall be installed, operated, and maintained in accordance with manufacturer's recommendations. (Rule 210.1)
4. 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)
5. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
6. 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)
7. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions 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 209)
9. 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)
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. Engine operation for maintenance and testing shall not exceed 30 hours per year without prior District approval. (Rule 210.1)
12. Engine operation shall not exceed 2,500 hours per year without prior District approval. (Rule 210.1)
Emission Unit 277 Permit Conditions

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection 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:

<table>
<thead>
<tr>
<th>Air Contaminant</th>
<th>Rate (as defined)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Particulate Matter (PM\textsubscript{10})</strong></td>
<td>0.023 gm/bhp-hr</td>
</tr>
<tr>
<td></td>
<td>0.02 lb/hr</td>
</tr>
<tr>
<td></td>
<td>0.55 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.03 ton/yr</td>
</tr>
<tr>
<td><strong>Sulfur Oxides (SO\textsubscript{x} as SO\textsubscript{2})</strong></td>
<td>0.005 lb/hr</td>
</tr>
<tr>
<td></td>
<td>0.12 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.01 ton/yr</td>
</tr>
<tr>
<td><strong>Oxides of Nitrogen (NO\textsubscript{x} as NO\textsubscript{2})</strong></td>
<td>2.8 gm/bhp-hr</td>
</tr>
<tr>
<td></td>
<td>2.78 lb/hr</td>
</tr>
<tr>
<td></td>
<td>66.68 lb/day</td>
</tr>
<tr>
<td></td>
<td>3.47 ton/yr</td>
</tr>
<tr>
<td><strong>Volatile Organic Compounds (VOC)</strong></td>
<td>0.2 gm/bhp-hr</td>
</tr>
<tr>
<td><strong>(as defined in Rule 210.1)</strong></td>
<td>0.20 lb/hr</td>
</tr>
<tr>
<td></td>
<td>4.76 lb/day</td>
</tr>
<tr>
<td></td>
<td>0.25 ton/yr</td>
</tr>
<tr>
<td><strong>Carbon Monoxide</strong></td>
<td>2.58 gm/bhp-hr</td>
</tr>
<tr>
<td></td>
<td>61.92 lb/hr</td>
</tr>
<tr>
<td></td>
<td>3.22 lb/day</td>
</tr>
</tbody>
</table>

(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 278 Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boiler Serving, including following equipment:

93-MMBtu/hr natural gas fueled boiler with low NOx burners.

OPERATIONAL CONDITIONS:

1. Boiler shall be fueled with natural gas. (Rule 210.1)
2. Boiler described above shall be equipped with low NOx burners. (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. Visible emissions from boiler exhaust stack shall not exceed 5% opacity or Ringelmann No. ¼. (Rule 210.1 BACT Requirement)
5. Boiler operation shall not exceed 4380-hours/year (180-days) without prior District approval. (Rule 210.1)
6. Boiler exhaust concentration of sulfur oxides (calculated as SO2) shall not exceed 2000 parts per million on a volume basis (ppmv). (Rule 407)
7. If natural gas is used as fuel, volume of natural gas used as fuel for boiler shall not exceed 388.0 million standard cubic feet per year (MMscf/yr. (Rule 210.1)
8. Operator shall comply with applicable monitoring, testing, and recordkeeping requirements of Rule 425.2. (Rule 425.2)
9. Operator shall maintain records of total fuel use. (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. 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)
12. Subject boiler and Cogeneration unit Duct Burner (PTO No. 1004077) shall not operate simultaneously. (Rule 210.1)
13. 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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to 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 (PM$_{10}$):**
  - 0.67 lb/hr
  - 16.16 lb/day
  - 2.95 ton/yr

- **Sulfur Oxides (SO$_x$ as SO$_2$):**
  - 0.05 lb/hr
  - 1.21 lb/day
  - 0.22 ton/yr

- **Oxides of Nitrogen (NO$_x$ as NO$_2$):**
  - 30 ppmv @ 3% O$_2$ Proposed
  - 3.35 lb/hr
  - 80.35 lb/day
  - 14.66 ton/yr

- **Volatile Organic Compounds (VOC):**
  - 0.49 lb/hr
  - 11.69 lb/day
  - 2.13 ton/yr

- **Carbon Monoxide:**
  - 50 ppmv
  - 3.44 lb/hr
  - 82.58 lb/day
  - 15.07 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 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 279 Permit Conditions

Facility Number Emissions Unit Description of Source
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 entainment 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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 45 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 ($\text{PM}_{10}$): 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 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.
Emission Unit 282 Permit Conditions

<table>
<thead>
<tr>
<th>Facility Number</th>
<th>Emissions Unit</th>
<th>Description of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004</td>
<td>282</td>
<td>Air Compressor</td>
</tr>
</tbody>
</table>

**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.

**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 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 NOx 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

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

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

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to EKAPCD within 45 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:

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Rate</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Particulate Matter (PM$_{10}$):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.15</td>
<td>gm/bhp-hr; 17 CCR 93116</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.15</td>
<td>lb/hr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.49</td>
<td>lb/day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.36</td>
<td>ton/yr</td>
<td></td>
</tr>
<tr>
<td><strong>Sulfur Oxides (SO$_x$ as SO$_2$):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.01</td>
<td>lb/hr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.12</td>
<td>lb/day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.01</td>
<td>ton/yr</td>
<td></td>
</tr>
<tr>
<td><strong>Oxides of Nitrogen (NO$_2$):</strong></td>
<td>2.8</td>
<td>gm/bhp-hr; 17 CCR 93116</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.72</td>
<td>lb/hr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>65.20</td>
<td>lb/day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.79</td>
<td>ton/yr</td>
<td></td>
</tr>
<tr>
<td><strong>Volatile Organic Compounds (VOC):</strong></td>
<td>0.2</td>
<td>gm/bhp-hr; 17 CCR 93116</td>
<td>(as defined in Rule 210.1)</td>
</tr>
<tr>
<td>(as defined in Rule 210.1)</td>
<td>0.19</td>
<td>lb/hr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.66</td>
<td>lb/day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.49</td>
<td>ton/yr</td>
<td></td>
</tr>
<tr>
<td><strong>Carbon Monoxide:</strong></td>
<td>2.6</td>
<td>gm/bhp-hr; 17 CCR 93116</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.52</td>
<td>lb/hr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60.54</td>
<td>lb/day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.31</td>
<td>ton/yr</td>
<td></td>
</tr>
</tbody>
</table>

(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 283 Permit Conditions

Facility Number 1004  Emission Unit 283  Description of Source Emergency Generator

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Generator, 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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)
Emission Unit 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 45 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 (PM$_{10}$):**
  - 0.22 gm/bhp-hr
  - 0.04 lb/hr
  - 0.99 lb/day
  - 0.004 ton/yr

- **Sulfur Oxides (SOx as SO$_2$):**
  - 0.001 lb/hr
  - 0.02 lb/day
  - 0.0001 ton/yr

- **Oxides of Nitrogen (NO$_2$):**
  - 3.3 gm/bhp-hr
  - 0.62 lb/hr
  - 14.84 lb/day
  - 0.06 ton/yr

- **Volatile Organic Compounds (VOC):**
  - 0.2 gm/bhp-hr
  - 0.04 lb/hr
  - 0.90 lb/day
  - 0.004 ton/yr

- **Carbon Monoxide:**
  - 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 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)
Applicable provisions of 40 CFR 60 Subpart A shall apply.


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.
Applicable provisions of 40 CFR 60 Subpart Dc shall apply.


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.e. 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 NOX 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.
§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 SO\(_2\) in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO\(_2\) emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO\(_2\) 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 SO\(_2\) in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO\(_2\) emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO\(_2\) 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 SO\(_2\) in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO\(_2\) emission rate (80 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO\(_2\) 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 SO\(_2\) emissions limit or the 90 percent SO\(_2\) reduction requirement specified in paragraph (a) of this section and the emission limit determined pursuant to paragraph (e)(2) of this section.

(2) Combusts only coal and that uses an emerging technology for the control of SO\(_2\) emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO\(_2\) in excess of 50 percent (0.50) of the potential SO\(_2\) emission rate (50 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO\(_2\) 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 SO\(_2\) 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 SO\(_2\) 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/MBtu) 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/MBtu heat input;

\(K_a = 520 \text{ ng/J (1.2 lb/MBtu)}\);

\(K_b = 260 \text{ ng/J (0.60 lb/MBtu)}\);

\(K_c = 215 \text{ ng/J (0.50 lb/MBtu)}\);

\(H_a\) = 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 SO\textsubscript{2} emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO\textsubscript{2} 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 SO\textsubscript{2} 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 combuts 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 combuts wood or combuts 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, oil, wood, or 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 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 (Eₜₒ) and the 30-day average SO₂ emission rate (Eₐₒ). 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 Eₐₒ 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 Eₐₒ (Eₐₒ₀) is used in Equation 19-19 of Method 19 of appendix A of this part to compute the adjusted Eₐₒ (Eₐₒ₀). The Eₐₒ₀ is computed using the following formula:

\[
E_{a_0} = \frac{E_{a_0} - E_{w} (1 - X_1)}{X_1}
\]
<table>
<thead>
<tr>
<th>Where:</th>
</tr>
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<tbody>
<tr>
<td>( E_{h0} = \text{Adjusted } E_h, \text{ ng/J (lb/MMBtu);} )</td>
</tr>
<tr>
<td>( E_h = \text{Hourly } SO_2 \text{ emission rate, ng/J (lb/MMBtu);} )</td>
</tr>
<tr>
<td>( E_w = \text{SO}_2 \text{ 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. )</td>
</tr>
<tr>
<td>( X_k = \text{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.} )</td>
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</table>

(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:
| \( \%P_s = \text{Potential } SO_2 \text{ emission rate, in percent;} \) |
| \( \%R_g = SO_2 \text{ removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and} \) |
| \( \%R_f = SO_2 \text{ removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.} \) |

(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 \( \%P_w \), an adjusted \( \%R_g (\%R_{go}) \) is computed from \( E_{h0} \) from paragraph (e)(1) of this section and an adjusted average \( SO_2 \) inlet rate (\( E_{a0} \)) using the following formula:

\[
\%R_{go} = \frac{100 \left( 1 - \frac{E_{a0}}{E_a} \right)}{E_a}
\]

Where:
| \( \%R_{go} = \text{Adjusted } \%R_g, \text{ in percent;} \) |
| \( E_{a0} = \text{Adjusted } E_a, \text{ ng/J (lb/MMBtu); and} \) |
| \( E_a = \text{Adjusted average } SO_2 \text{ inlet rate, ng/J (lb/MMBtu).} \) |

(ii) To compute \( E_{h0} \), an adjusted hourly \( SO_2 \) inlet rate (\( E_{h0} \)) is used. The \( E_{h0} \) is computed using the following formula:

\[
E_{h0} = \frac{E_{hk} - E_w \left( 1 - X_k \right)}{X_k}
\]
Where:

\( E_{h0} = \text{Adjusted } E_{hi}, \text{ ng/J (lb/MMBtu)}; \)

\( E_{hi} = \text{Hourly SO}_2 \text{ inlet rate, ng/J (lb/MMBtu)}; \)

\( E_w = \text{SO}_2 \text{ concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value } E_w \text{ for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure } E_w \text{ if the owner or operator elects to assume } E_w = 0; \) and

\( X_k = \text{Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.} \)

(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 \( E_{ho} \), 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 \( E_{ho} \), 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(c)(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.e., reference method) data and performance test (i.e., 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/erttool.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 SO\textsubscript{2} CEMS at the outlet from the SO\textsubscript{2} control device (or outlet of the steam generating unit if no SO\textsubscript{2} control device is used) shall be 125 percent of the maximum estimated hourly potential SO\textsubscript{2} emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO\textsubscript{2} control device (or outlet of the steam generating unit if no SO\textsubscript{2} control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO\textsubscript{2} emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO\textsubscript{2} control device (or outlet of the steam generating unit if no SO\textsubscript{2} control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO\textsubscript{2} 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 SO\textsubscript{2} 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 SO\textsubscript{2} at the inlet or outlet of the SO\textsubscript{2} 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 SO\textsubscript{2} and CO\textsubscript{2} 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 SO\textsubscript{2} 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.e., 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.e., 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.e., 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 §60.48(c).
§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:
   a. The name of the oil supplier;
   b. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c; and
   c. The sulfur content or maximum sulfur content of the oil.

2. For residual oil:
   a. The name of the oil supplier;
   b. 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;
   c. The sulfur content of the oil from which the shipment came (or of the shipment itself); and
   d. The method used to determine the sulfur content of the oil.

3. For coal:
   a. The name of the coal supplier;
   b. 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);
   c. 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
   d. The methods used to determine the properties of the coal.

4. For other fuels:
   a. The name of the supplier of the fuel;
   b. The potential sulfur emissions rate or maximum potential sulfur emissions rate of the fuel in ng/J heat input; and
   c. 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 §60.48cf to demonstrate compliance with the \( \text{SO}_2 \) 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 \( \text{SO}_2 \) 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.

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Applicable provisions of 40 CFR 60 Subpart GG shall apply.


**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 (e) 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:  
\[ STD = 0.0075 \left( \frac{14.4}{Y} \right) + F \]  
where:
STD = allowable ISO corrected (if required as given in §60.335(b)(1)) NO\textsubscript{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\textsubscript{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:  
\[ STD = 0.0150 \left( \frac{14.4}{Y} \right) + F \] |
where:
STD = allowable ISO corrected (if required as given in §60.335(b)(1)) NO\textsubscript{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\textsubscript{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\textsubscript{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\textsubscript{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:

<table>
<thead>
<tr>
<th>Fuel-bound nitrogen (percent by weight)</th>
<th>F (NO\textsubscript{X} percent by volume)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N &lt; 0.15</td>
<td>0</td>
</tr>
<tr>
<td>0.015 &lt; N ≤ 0.1</td>
<td>0.04 (N)</td>
</tr>
<tr>
<td>0.1 &lt; N ≤ 0.25</td>
<td>0.004 + 0.0067(N - 0.1)</td>
</tr>
<tr>
<td>N &gt; 0.25</td>
<td>0.005</td>
</tr>
</tbody>
</table>

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.

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(f) Stationary gas turbines using water or steam injection for control of NO\textsubscript{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 NOX 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 NOX 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 NOX and O2 monitors. As an alternative, a CO2 monitor may be used to adjust the measured NOX 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 NOX and diluent monitors may be performed individually or on a combined basis, i.e., the relative accuracy tests of the CEMS may be performed either:
   (i) On a ppm basis (for NOX) and a percent O2 basis for oxygen; or
   (ii) On a ppm at 15 percent O2 basis; or
   (iii) On a ppm basis (for NOX) and a percent CO2 basis (for a CO2 monitor that uses the procedures in Method 20 to correct the NOX 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 NOX and diluent, the data acquisition and handling system must calculate and record the hourly NOX emissions in the units of the applicable NOX emission standard under §60.332(a), i.e., percent NOX 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 (H0), minimum ambient temperature (T0), and minimum combustor inlet absolute pressure (P0) into the ISO correction equation.
(iii) If the owner or operator has installed a NO\textsubscript{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\textsubscript{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\textsubscript{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\textsubscript{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\textsubscript{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\textsubscript{X} emissions, may, but is not required to, use a NO\textsubscript{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\textsubscript{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\textsubscript{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\textsubscript{X} mode.

3. For any turbine that uses SCR to reduce NO\textsubscript{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\textsubscript{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\textsubscript{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 NOx 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)(C)(2) of this section. Otherwise, follow the procedures in paragraph (i)(3)(i)(C)(3) 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.e., 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 NOx and diluent CEMS:

(A) An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NOx concentration exceeds the applicable emission limit in §60.332(a)(1) or (2). For the purposes of this subpart, a “4-hour rolling average NOx concentration” is the arithmetic average of the average NOx 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 NOx 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 NOx 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 NOx 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) *Ice fog.* 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) *Emergency fuel.* 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

<table>
<thead>
<tr>
<th>§60.335</th>
<th>(a) The owner or operator shall conduct the performance tests required in §60.8, using either</th>
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<tr>
<td></td>
<td>(1) EPA Method 20,</td>
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<td>(2) ASTM D6522-00 (incorporated by reference, see §60.17), or</td>
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<td>(3) EPA Method 7E and either EPA Method 3 or 3A in appendix A to this part, to determine NO&lt;sub&gt;X&lt;/sub&gt; and diluent concentration.</td>
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<td>(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.</td>
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<td>(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:</td>
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<td>(i) You may perform a stratification test for NO&lt;sub&gt;X&lt;/sub&gt; and diluent pursuant to</td>
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<td>(A) [Reserved]</td>
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<td>(B) The procedures specified in section 6.5.6.1(a) through (e) appendix A to part 75 of this chapter.</td>
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| | (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 NOX 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 NOX concentration during the stratification test; or

(B) If each of the individual traverse point NOX 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 (NOXo) 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:

\[
\text{NOX} = (\text{NOXo})(\text{Pr}/\text{Po})^{0.5} e^{19(\text{Ho}−0.00633) (288 °K/Ta)^{1.53}}
\]

Where:
- NOX = emission concentration of NOX at 15 percent O2 and ISO standard ambient conditions, ppm by volume, dry basis,
- NOXo = mean observed NOX concentration, ppm by volume, dry basis, at 15 percent O2,
- Pr = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure. Alternatively, you may use 760 mm Hg (29.92 in Hg),
- Po = observed combustor inlet absolute pressure at test, mm Hg. Alternatively, you may use the barometric pressure for the date of the test,
- Ho = observed humidity of ambient air, g H2O/g air,
- e = transcendental constant, 2.718, and
- Ta = 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 NOX 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 NOX emission limit in §60.332 for the combustion turbine must still be met.
(4) If water or steam injection is used to control NOX with no additional post-combustion NOX 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 NOX 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 NOX 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 NOX 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 NOX 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.
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.
§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.

(c) As an alternative to the periodic Method 22 (40 CFR part 60, Appendix A-7) visible emissions inspections specified in paragraph (e) 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.

60 Subpart OOO-5
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 (e.g., 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).
(c) 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.

\[ V_e = \frac{Q_f}{A_e} \]  \hspace{1cm} \text{(E q. 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**

<table>
<thead>
<tr>
<th>Subpart A reference</th>
<th>Applies to subpart OOO</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>60.4, Address</td>
<td>Yes</td>
<td>Except in §60.4(a) and (b) submittals need not be submitted to both the EPA Region and delegated State authority (§60.676(k)).</td>
</tr>
<tr>
<td>60.7, Notification and recordkeeping</td>
<td>Yes</td>
<td>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)).</td>
</tr>
<tr>
<td>60.8, Performance tests</td>
<td>Yes</td>
<td>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)).</td>
</tr>
<tr>
<td>60.11, Compliance with standards and maintenance requirements</td>
<td>Yes</td>
<td>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.</td>
</tr>
<tr>
<td>60.18, General control device</td>
<td>No</td>
<td>Flares will not be used to comply with the emission limits.</td>
</tr>
</tbody>
</table>
### Table 2 to Subpart OOO of Part 60—Stack Emission Limits for Affected Facilities With Capture Systems

<table>
<thead>
<tr>
<th>For</th>
<th>The owner or operator must meet a PM limit of</th>
<th>And the owner or operator must meet an opacity limit of</th>
<th>The owner or operator must demonstrate compliance with these limits by conducting</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
<td>0.05 g/dscm (0.022 gr/dscf)(^a)</td>
<td>7 percent for dry control devices(^b)</td>
<td>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).</td>
</tr>
<tr>
<td>Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008</td>
<td>0.032 g/dscm (0.014 gr/dscf)(^a)</td>
<td>Not applicable (except for individual enclosed storage bins) 7 percent for dry control devices on individual enclosed storage bins</td>
<td>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).</td>
</tr>
</tbody>
</table>

\(^a\)Exceptions to the PM limit apply for individual enclosed storage bins and other equipment. See §60.672(d) through (f).

\(^b\)The 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

<table>
<thead>
<tr>
<th>For</th>
<th>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)</th>
<th>The owner or operator must meet the following fugitive emissions limit for crushers at which a capture system is not used</th>
<th>The owner or operator must demonstrate compliance with these limits by conducting</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
<td>10 percent opacity</td>
<td>15 percent opacity</td>
<td>An initial performance test according to §60.11 of this part and §60.675 of this subpart.</td>
</tr>
<tr>
<td>Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008</td>
<td>7 percent opacity</td>
<td>12 percent opacity</td>
<td>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</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>
Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Applicable provisions of 40 CFR 60 Subpart III shall apply.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

**Emission Standards for Non-Emergency Engines**

| §60.4204 | (a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in §60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

(c) Owners and operators of non-emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the following requirements:

1. For engines installed prior to January 1, 2012, limit the emissions of NOX in the stationary CI internal combustion engine exhaust to the following:
   
   (i) 17.0 grams per kilowatt-hour (g/KW-hr) (12.7 grams per horsepower-hour (g/HP-hr)) when maximum engine speed is less than 130 revolutions per minute (rpm);

   (ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where $n$ is maximum engine speed; and

   (iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

2. For engines installed on or after January 1, 2012 and before January 1, 2016, limit the emissions of NOx in the stationary CI internal combustion engine exhaust to the following:

   (i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

   (ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where $n$ is maximum engine speed; and

   (iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

3. For engines installed on or after January 1, 2016, limit the emissions of NOx in the stationary CI internal combustion engine exhaust to the following:

   (i) 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;
(ii) \(9.0 \cdot n^{-0.20} \text{ g/KW-hr} (6.7 \cdot n^{-0.20} \text{ g/HP-hr})\) where \(n\) (maximum engine speed) is 130 or more but less than 2,000 rpm; and

(iii) \(2.0 \text{ g/KW-hr} (1.5 \text{ g/HP-hr})\) where maximum engine speed is greater than or equal to 2,000 rpm.

(4) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

(d) Owners and operators of non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the not-to-exceed (NTE) standards as indicated in §60.4212.

(e) Owners and operators of any modified or reconstructed non-emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed non-emergency stationary CI ICE that are specified in paragraphs (a) through (d) of this section.

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**Emission Standards for Emergency Engines**

§60.4205

(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in Table 1 to this subpart. Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

(d) Owners and operators of emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in this section.

(1) For engines installed prior to January 1, 2012, limit the emissions of NO\(_X\) in the stationary CI internal combustion engine exhaust to the following:

(i) \(17.0 \text{ g/KW-hr} (12.7 \text{ g/HP-hr})\) when maximum engine speed is less than 130 rpm;

(ii) \(45 \cdot n^{-0.2} \text{ g/KW-hr} (34 \cdot n^{-0.2} \text{ g/HP-hr})\) when maximum engine speed is 130 or more but less than 2,000 rpm, where \(n\) is maximum engine speed; and

(iii) \(9.8 \text{ g/kW-hr} (7.3 \text{ g/HP-hr})\) when maximum engine speed is 2,000 rpm or more.
(2) For engines installed on or after January 1, 2012, limit the emissions of NO\textsubscript{X} in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where $n$ is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

(e) Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in §60.4212.

(f) Owners and operators of any modified or reconstructed emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed CI ICE that are specified in paragraphs (a) through (e) of this section.

### Fuel Requirements

§60.4207

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

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

(c) [Reserved]

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

(e) Stationary CI ICE that have a national security exemption under §60.4200(d) are also exempt from the fuel requirements in this section.
Compliance Requirements

§60.4210  (a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

1. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

2. Change only those emission-related settings that are permitted by the manufacturer; and

3. Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

1. Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

2. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

3. Keeping records of engine manufacturer data indicating compliance with the standards.

4. Keeping records of control device vendor data indicating compliance with the standards.

5. Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.

(d) If you are an owner or operator and must comply with the emission standards specified in §60.4204(c) or §60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.

1. Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in §60.4213.
(2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.

(i) Identification of the specific parameters you propose to monitor continuously;

(ii) A discussion of the relationship between these parameters and NOX and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NOX and PM emissions;

(iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in §60.4213.

(e) If you are an owner or operator of a modified or reconstructed stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(e) or §60.4205(f), you must demonstrate compliance according to one of the methods specified in paragraphs (e)(1) or (2) of this section.

(1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in §60.4204(e) or §60.4205(f), as applicable.

(2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in §60.4212 or §60.4213, as appropriate. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

(f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

(g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:
(1) If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

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

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

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

$60.4212$

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

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:
NTE requirement for each pollutant = \((.25) \times (\text{STD})\)  \(\text{Eq. 1}\)

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

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

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

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

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

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

Test Methods for Stationary CI Engine Greater than or Equal to 30 liters/Cylinder

§60.4213

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (f) of this section.

(a) Each performance test must be conducted according to the requirements in §60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c).

(c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must last at least 1 hour.

(d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.

(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

\[ \frac{C_i - C_o}{C_i} \times 100 = R \]  \(\text{Eq. 2}\)
Where:
Ci = concentration of NOx or PM at the control device inlet,
Co = concentration of NOx or PM at the control device outlet, and
R = percent reduction of NOx or PM emissions.

(2) You must normalize the NOx or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO2) using the procedures described in paragraph (d)(3) of this section.

\[
\frac{C_{adj}}{C_d} = \frac{5.9}{20.9 - \%CO_2}
\]

(3) If pollutant concentrations are to be corrected to 15 percent O2 and CO2 concentration is measured in lieu of O2 concentration measurement, a CO2 correction factor is needed. Calculate the CO2 correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.

(i) Calculate the fuel-specific Fo value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

\[
F_o = \frac{0.209 \times F_d}{F_c}
\]

Where:
Fo = Fuel factor based on the ratio of O2 volume to the ultimate CO2 volume produced by the fuel at zero percent excess air.
0.209 = Fraction of air that is O2, percent/100.
Fd = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm3/J (dscf/106 Btu).
Fc = Ratio of the volume of CO2 produced to the gross calorific value of the fuel from Method 19, dsm3/J (dscf/106 Btu).

(ii) Calculate the CO2 correction factor for correcting measurement data to 15 percent O2, as follows:

\[
X_{CO2} = \frac{5.9}{F_o}
\]

Where:
X_{CO2} = CO2 correction factor, percent.
5.9 = 20.9 percent O2–15 percent O2, the defined O2 correction value, percent.

(iii) Calculate the NOx and PM gas concentrations adjusted to 15 percent O2 using CO2 as follows:

\[
C_{adj} = C_d \times \frac{X_{CO2}}{\%CO_2}
\]
Where:
- $C_{adj}$ = Calculated NOX or PM concentration adjusted to 15 percent O2.
- $C_d$ = Measured concentration of NOX or PM, uncorrected.
- %CO2 = Measured CO2 concentration, dry basis, percent.

(c) To determine compliance with the NOX mass per unit output emission limitation, convert the concentration of NOX in the engine exhaust using Equation 7 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{\text{KW-hour}}$$  \hspace{1cm} (Eq. 7)

Where:
- $ER$ = Emission rate in grams per KW-hour.
- $C_d$ = Measured NOX concentration in ppm.
- $1.912 \times 10^{-3}$ = Conversion constant for ppm NOX to grams per standard cubic meter at 25 degrees Celsius.
- $Q$ = Stack gas volumetric flow rate, in standard cubic meter per hour.
- $T$ = Time of test run, in hours.
- KW-hour = Brake work of the engine, in KW-hour.

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{\text{KW-hour}}$$  \hspace{1cm} (Eq. 8)

Where:
- $ER$ = Emission rate in grams per KW-hour.
- $C_{adj}$ = Calculated PM concentration in grams per standard cubic meter.
- $Q$ = Stack gas volumetric flow rate, in standard cubic meter per hour.
- $T$ = Time of test run, in hours.
- KW-hour = Energy output of the engine, in KW.

### Notification, Reporting, and Recordkeeping Requirements

§60.4214  
(a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.

(1) Submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.

(i) Name and address of the owner or operator;

(ii) The address of the affected source;
(iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(iv) Emission control equipment; and

(v) Fuel used.

(2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.

(i) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(ii) Maintenance conducted on the engine.

(iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

(iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

(d) If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4211(f)(2)(ii) and (iii) or that operates for the purposes specified in §60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in §60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(2)(ii) and (iii).
(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §60.4211(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purposes specified in §60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4.

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**General Provisions**

| §60.4218 | Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you. |
| §60.4219 | Table 1 to Subpart III of Part 60—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder |

[As stated in §§60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

<table>
<thead>
<tr>
<th>Maximum engine power</th>
<th>Emission standards for stationary pre-2007 model year engines with a displacement of &lt;10 liters per cylinder and 2007-2010 model year engines &gt;2,237 KW (3,000 HP) and with a displacement of &lt;10 liters per cylinder in g/KW-hr (g/HP-hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NMHC + NOₓ</td>
</tr>
<tr>
<td>KW&lt;8 (HP&lt;11)</td>
<td>10.5 (7.8)</td>
</tr>
<tr>
<td>8≤KW&lt;19 (11≤HP&lt;25)</td>
<td>9.5 (7.1)</td>
</tr>
<tr>
<td>19≤KW&lt;37 (25≤HP&lt;50)</td>
<td>9.5 (7.1)</td>
</tr>
<tr>
<td>37≤KW&lt;56 (50≤HP&lt;75)</td>
<td></td>
</tr>
<tr>
<td>56≤KW&lt;75 (75≤HP&lt;100)</td>
<td></td>
</tr>
<tr>
<td>75≤KW&lt;130 (100≤HP&lt;175)</td>
<td></td>
</tr>
<tr>
<td>130≤KW&lt;225</td>
<td>1.3 (1.0)</td>
</tr>
</tbody>
</table>
### Table 2 to Subpart IIII of Part 60—Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder

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

<table>
<thead>
<tr>
<th>Engine power</th>
<th>Emission standards for 2008 model year and later emergency stationary CI ICE &lt;37 KW (50 HP) with a displacement of &lt;10 liters per cylinder in g/KW-hr (g/HP-hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model year(s)</td>
</tr>
<tr>
<td>KW&lt;8 (HP&lt;11)</td>
<td>2008+</td>
</tr>
<tr>
<td>8≤KW&lt;19</td>
<td>2008+</td>
</tr>
<tr>
<td>(11≤HP&lt;25)</td>
<td></td>
</tr>
<tr>
<td>19≤KW&lt;37</td>
<td>2008+</td>
</tr>
<tr>
<td>(25≤HP&lt;50)</td>
<td></td>
</tr>
</tbody>
</table>

### Table 3 to Subpart IIII of Part 60—Certification Requirements for Stationary Fire Pump Engines

As stated in §60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:

| Engine power | Starting model year engine manufacturers must certify new stationary fire pump engines according to §60.4202(d)
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>KW&lt;75 (HP&lt;100)</td>
<td>2011</td>
</tr>
<tr>
<td>75≤KW&lt;130 (100≤HP&lt;175)</td>
<td>2010</td>
</tr>
<tr>
<td>130≤KW≤560 (175≤HP≤750)</td>
<td>2009</td>
</tr>
<tr>
<td>KW&gt;560 (HP&gt;750)</td>
<td>2008</td>
</tr>
</tbody>
</table>
Manufacturers of fire pump stationary CI ICE with a maximum engine power greater than or equal to 37 kW (50 HP) and less than 450 kW (600 HP) and a rated speed of greater than 2,650 revolutions per minute (rpm) are not required to certify such engines until three model years following the model year indicated in this Table 3 for engines in the applicable engine power category.

Table 4 to Subpart III of Part 60—Emission Standards for Stationary Fire Pump Engines

[As stated in §§60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

<table>
<thead>
<tr>
<th>Maximum engine power</th>
<th>Model year(s)</th>
<th>NMHC + NOX</th>
<th>CO</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>KW&lt;8 (HP&lt;11)</td>
<td>2010 and earlier</td>
<td>10.5 (7.8)</td>
<td>8.0 (6.0)</td>
<td>1.0 (0.75)</td>
</tr>
<tr>
<td></td>
<td>2011+</td>
<td>7.5 (5.6)</td>
<td>0.40 (0.30)</td>
<td></td>
</tr>
<tr>
<td>8≤KW&lt;19 (11≤HP&lt;25)</td>
<td>2010 and earlier</td>
<td>9.5 (7.1)</td>
<td>6.6 (4.9)</td>
<td>0.80 (0.60)</td>
</tr>
<tr>
<td></td>
<td>2011+</td>
<td>7.5 (5.6)</td>
<td>0.40 (0.30)</td>
<td></td>
</tr>
<tr>
<td>19≤KW&lt;37 (25≤HP&lt;50)</td>
<td>2010 and earlier</td>
<td>9.5 (7.1)</td>
<td>5.5 (4.1)</td>
<td>0.80 (0.60)</td>
</tr>
<tr>
<td></td>
<td>2011+</td>
<td>7.5 (5.6)</td>
<td>0.30 (0.22)</td>
<td></td>
</tr>
<tr>
<td>37≤KW&lt;56 (50≤HP&lt;75)</td>
<td>2010 and earlier</td>
<td>10.5 (7.8)</td>
<td>5.0 (3.7)</td>
<td>0.80 (0.60)</td>
</tr>
<tr>
<td></td>
<td>2011+</td>
<td>4.7 (3.5)</td>
<td>0.40 (0.30)</td>
<td></td>
</tr>
<tr>
<td>56≤KW&lt;75 (75≤HP&lt;100)</td>
<td>2010 and earlier</td>
<td>10.5 (7.8)</td>
<td>5.0 (3.7)</td>
<td>0.80 (0.60)</td>
</tr>
<tr>
<td></td>
<td>2011+</td>
<td>4.7 (3.5)</td>
<td>0.40 (0.30)</td>
<td></td>
</tr>
<tr>
<td>75≤KW&lt;130 (100≤HP&lt;175)</td>
<td>2009 and earlier</td>
<td>10.5 (7.8)</td>
<td>5.0 (3.7)</td>
<td>0.80 (0.60)</td>
</tr>
<tr>
<td></td>
<td>2010+</td>
<td>4.0 (3.0)</td>
<td>0.30 (0.22)</td>
<td></td>
</tr>
<tr>
<td>130≤KW&lt;225 (175≤HP&lt;300)</td>
<td>2008 and earlier</td>
<td>10.5 (7.8)</td>
<td>3.5 (2.6)</td>
<td>0.54 (0.40)</td>
</tr>
<tr>
<td></td>
<td>2009+</td>
<td>4.0 (3.0)</td>
<td>0.20 (0.15)</td>
<td></td>
</tr>
<tr>
<td>225≤KW&lt;450 (300≤HP&lt;600)</td>
<td>2008 and earlier</td>
<td>10.5 (7.8)</td>
<td>3.5 (2.6)</td>
<td>0.54 (0.40)</td>
</tr>
<tr>
<td></td>
<td>2009+</td>
<td>4.0 (3.0)</td>
<td>0.20 (0.15)</td>
<td></td>
</tr>
<tr>
<td>450≤KW≤560 (600≤HP≤750)</td>
<td>2008 and earlier</td>
<td>10.5 (7.8)</td>
<td>3.5 (2.6)</td>
<td>0.54 (0.40)</td>
</tr>
<tr>
<td></td>
<td>2009+</td>
<td>4.0 (3.0)</td>
<td>0.20 (0.15)</td>
<td></td>
</tr>
<tr>
<td>KW&gt;560 (HP&gt;750)</td>
<td>2007 and earlier</td>
<td>10.5 (7.8)</td>
<td>3.5 (2.6)</td>
<td>0.54 (0.40)</td>
</tr>
<tr>
<td></td>
<td>2008+</td>
<td>6.4 (4.8)</td>
<td>0.20 (0.15)</td>
<td></td>
</tr>
</tbody>
</table>

1For model years 2011-2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

2For model years 2010-2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.
In model years 2009-2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

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

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

<table>
<thead>
<tr>
<th>Engine power</th>
<th>Starting model year</th>
</tr>
</thead>
<tbody>
<tr>
<td>19≤KW&lt;56 (25≤HP&lt;75)</td>
<td>2013</td>
</tr>
<tr>
<td>56≤KW&lt;130 (75≤HP&lt;175)</td>
<td>2012</td>
</tr>
<tr>
<td>KW≥130 (HP≥175)</td>
<td>2011</td>
</tr>
</tbody>
</table>

**Table 6 to Subpart III of Part 60—Optional 3-Mode Test Cycle for Stationary Fire Pump Engines**

<table>
<thead>
<tr>
<th>Mode No.</th>
<th>Engine speed¹</th>
<th>Torque (percent)²</th>
<th>Weighting factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rated</td>
<td>100</td>
<td>0.30</td>
</tr>
<tr>
<td>2</td>
<td>Rated</td>
<td>75</td>
<td>0.50</td>
</tr>
<tr>
<td>3</td>
<td>Rated</td>
<td>50</td>
<td>0.20</td>
</tr>
</tbody>
</table>

¹Engine speed: ±2 percent of point.

²Torque: NFPA certified nameplate HP for 100 percent point. All points should be ±2 percent of engine percent load value.

**Table 7 to Subpart III of Part 60—Requirements for Performance Tests for Stationary CI ICE With a Displacement of ≥30 Liters per Cylinder**

Each complying with the requirement to you must using according to the following requirements

1. Stationary CI internal combustion engine with a displacement of ≥ 30 liters per cylinder
   a. Reduce NOX emissions by 90 percent or more; i. Select the sampling port location and number/location of traverse points at the inlet and outlet of the control device;
   (a) For NOX, O2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (‘3-point long line’). If the duct is >12 inches in diameter and the
### b. Limit the concentration of NOX in the stationary combustion engine exhaust.

#### i. Select the sampling port location and number/location of traverse points at the exhaust of the stationary internal combustion engine;

- For NOX, O2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.

<table>
<thead>
<tr>
<th>ii. Measure O2 at the inlet and outlet of the control device;</th>
<th>(1) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b) Measurements to determine O2 concentration must be made at the same time as the measurements for NOX concentration.</td>
<td></td>
</tr>
</tbody>
</table>

| iii. If necessary, measure moisture content at the inlet and outlet of the control device; and |
| (2) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see §60.17) |
| (c) Measurements to determine moisture content must be made at the same time as the measurements for NOX concentration. |

| iv. Measure NOX at the inlet and outlet of the control device. |
| (3) Method 7E of 40 CFR part 60, appendix A-4, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see §60.17) |
| (d) NOX concentration must be at 15 percent O2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs. |
ii. Determine the O$_2$ concentration of the stationary internal combustion engine exhaust at the sampling port location; and

<table>
<thead>
<tr>
<th>Line</th>
<th>O2 concentration of the stationary internal combustion engine exhaust at the sampling port location; and</th>
<th>Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2</th>
<th>(b) Measurements to determine O$_2$ concentration must be made at the same time as the measurement for NO$_X$ concentration.</th>
</tr>
</thead>
<tbody>
<tr>
<td>iii.</td>
<td>If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and</td>
<td>Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see §60.17)</td>
<td>(c) Measurements to determine moisture content must be made at the same time as the measurement for NO$_X$ concentration.</td>
</tr>
<tr>
<td>iv.</td>
<td>Measure NO$_X$ at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device.</td>
<td>Method 7E of 40 CFR part 60, Appendix A-4, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see §60.17)</td>
<td>(d) NO$_X$ concentration must be at 15 percent O$_2$, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.</td>
</tr>
</tbody>
</table>

i. Select the sampling port location and the number of traverse points;

<table>
<thead>
<tr>
<th>Line</th>
<th>Sampling sites must be located at the inlet and outlet of the control device.</th>
<th>Method 1 or 1A of 40 CFR part 60, appendix A-1</th>
<th>(a) Sampling sites must be located at the inlet and outlet of the control device.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ii.</td>
<td>Measure O$_2$ at the inlet and outlet of the control device;</td>
<td>Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2</td>
<td>(b) Measurements to determine O$_2$ concentration must be made at the same time as the measurements for PM concentration.</td>
</tr>
<tr>
<td>iii.</td>
<td>If necessary, measure moisture content at the inlet and outlet of the control device; and</td>
<td>Method 4 of 40 CFR part 60, appendix A-3</td>
<td>(c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration.</td>
</tr>
<tr>
<td>iv.</td>
<td>Measure PM at the inlet and outlet of the control device.</td>
<td>Method 5 of 40 CFR part 60, appendix A-3</td>
<td>(d) PM concentration must be at 15 percent O$_2$, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.</td>
</tr>
</tbody>
</table>

60 Subpart III-17
d. Limit the concentration of PM in the stationary CI internal combustion engine exhaust

ii. Determine the \( O_2 \) concentration of the stationary internal combustion engine exhaust at the sampling port location;

iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and

iv. Measure PM at the exhaust of the stationary internal combustion engine.

(a) If using a control device, the sampling site must be located at the outlet of the control device.

(b) Measurements to determine \( O_2 \) concentration must be made at the same time as the measurements for PM concentration.

(c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration.

(d) PM concentration must be at 15 percent \( O_2 \), dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

Table 8 to Subpart III of Part 60—Applicability of General Provisions to Subpart III

<table>
<thead>
<tr>
<th>General Provisions citation</th>
<th>Subject of citation</th>
<th>Applies to subpart</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>§60.1 General applicability of the General Provisions</td>
<td>Yes</td>
<td>Additional terms defined in §60.4219.</td>
<td></td>
</tr>
<tr>
<td>§60.2 Definitions</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§60.3 Units and abbreviations</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§60.4 Address</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§60.5 Determination of construction or modification</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§60.6 Review of plans</td>
<td>Yes</td>
<td>Except that §60.6 only applies as specified in §60.4214(a).</td>
<td></td>
</tr>
<tr>
<td>§60.7 Notification and Recordkeeping</td>
<td>Yes</td>
<td>Except that §60.7 only applies as specified in §60.4214(a).</td>
<td></td>
</tr>
<tr>
<td>§60.8 Performance tests</td>
<td>Yes</td>
<td>Except that §60.8 only applies to stationary CI ICE with a displacement of ( \geq 30 ) liters per cylinder and engines that are not certified.</td>
<td></td>
</tr>
<tr>
<td>§60.9 Availability of information</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
<td>Requirement</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------------------------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>§60.10</td>
<td>State Authority</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§60.11</td>
<td>Compliance with standards and maintenance requirements</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Requirements are specified in subpart III.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§60.12</td>
<td>Circumvention</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§60.13</td>
<td>Monitoring requirements</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Except that §60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§60.14</td>
<td>Modification</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§60.15</td>
<td>Reconstruction</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§60.16</td>
<td>Priority list</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§60.17</td>
<td>Incorporations by reference</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§60.18</td>
<td>General control device requirements</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>§60.19</td>
<td>General notification and reporting requirements</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
Applicable provisions of 40 CFR 61 Subpart M shall apply.

[55 FR 48414, Nov. 20, 1990]

**Applicability**

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

**Standard for Roadways**

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

**Standard for Demolition and Renovation**

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

(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.
<table>
<thead>
<tr>
<th>Paragraph</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>61.145(b)(vi)</td>
<td>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.</td>
</tr>
<tr>
<td>61.145(b)(vii)</td>
<td>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.</td>
</tr>
<tr>
<td>61.145(b)(viii)</td>
<td>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.</td>
</tr>
<tr>
<td>61.145(b)(ix)</td>
<td>Scheduled starting and completion dates of demolition or renovation.</td>
</tr>
<tr>
<td>61.145(b)(x)</td>
<td>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.</td>
</tr>
<tr>
<td>61.145(b)(xi)</td>
<td>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.</td>
</tr>
<tr>
<td>61.145(b)(xii)</td>
<td>Name and location of the waste disposal site where the asbestos-containing waste material will be deposited.</td>
</tr>
<tr>
<td>61.145(b)(xiii)</td>
<td>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.</td>
</tr>
<tr>
<td>61.145(b)(xiv)</td>
<td>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.</td>
</tr>
<tr>
<td>61.145(b)(xv)</td>
<td>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.</td>
</tr>
<tr>
<td>61.145(b)(xvi)</td>
<td>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.</td>
</tr>
<tr>
<td>61.145(b)(xvii)</td>
<td>Name, address, and telephone number of the waste transporter.</td>
</tr>
<tr>
<td>(5)</td>
<td>The information required in paragraph (b)(4) of this section must be reported using a form similar to that shown in Figure 3.</td>
</tr>
</tbody>
</table>
§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 one 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.

(c) 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)(1), 61.145(c)(4)(ii), 61.145(c)(11)(i), 61.146(b)(2), 61.147(b)(2), 61.149(b), 61.149(c)(1)(i), 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 m$^3$/min/m$^2$ (30 ft$^3$/min/ft$^2$) for woven fabrics or 11 m$^3$/min/m$^2$ (35 ft$^3$/min/ft$^2$) for felted fabrics, except that 12 m$^3$/min/m$^2$ (40 ft$^3$/min/ft$^2$) for woven and 14 m$^3$/min/m$^2$ (45 ft$^3$/min/ft$^2$) for felted fabrics is allowed for filtering air from asbestos ore dryers; and
   
   ii. Ensuring that felted fabric weighs at least 475 grams per square meter (14 ounces per square yard) and is at least 1.6 millimeters (one-sixteenth inch) thick throughout; and
   
   iii. Avoiding the use of synthetic fabrics that contain fill yarn other than that which is spun.

2. Properly install, use, operate, and maintain all air-cleaning equipment authorized by this section. Bypass devices may be used only during upset or emergency conditions and then only for so long as it takes to shut down the operation generating the particulate asbestos material.

3. For fabric filter collection devices installed after January 10, 1989, provide for easy inspection for faulty bags.

(b) There are the following exceptions to paragraph (a)(1):

1. After January 10, 1989, if the use of fabric creates a fire or explosion hazard, or the Administrator determines that a fabric filter is not feasible, the Administrator may authorize as a substitute the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals (40 inches water gage pressure).

2. Use a HEPA filter that is certified to be at least 99.97 percent efficient for 0.3 micron particles.

3. The Administrator may authorize the use of filtering equipment other than described in paragraphs (a)(1) and (b)(1) and (2) of this section if the owner or operator demonstrates to the Administrator's satisfaction that it is equivalent to the described equipment in filtering particulate asbestos material.

### Reporting

#### §61.153

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

(i) If the fabric device uses a woven fabric, the airflow permeability in m³/min/m² 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/m², the minimum thickness in inches, and the airflow permeability in m³/min/m².

(2) If a fabric filter device is used to control emissions,

(i) The airflow permeability in m³/min/m² (ft³/min/ft²) if the fabric filter device uses a woven fabric, and, if the fabric is synthetic, whether the fill yarn is spun or not spun; and

(ii) If the fabric filter device uses a felted fabric, the density in g/m² (oz/yd²), the minimum thickness in millimeters (inches), and the airflow permeability in m³/min/m² (ft³/min/ft²).

(3) If a HEPA filter is used to control emissions, the certified efficiency.

(4) For sources subject to §§61.149 and 61.150:

(i) A brief description of each process that generates asbestos-containing waste material; and

(ii) The average volume of asbestos-containing waste material disposed of, measured in m³/day (yd³/day); and

(iii) The emission control methods used in all stages of waste disposal; and

(iv) The type of disposal site or incineration site used for ultimate disposal, the name of the site operator, and the name and location of the disposal site.

(5) For sources subject to §§61.151 and 61.154:

(i) A brief description of the site; and

(ii) The method or methods used to comply with the standard, or alternative procedures to be used.

(b) The information required by paragraph (a) of this section must accompany the information required by §61.10. Active waste disposal sites subject to §61.154 shall also comply with this provision. Roadways, demolition and renovation, spraying, and insulating materials are exempted from the requirements of §61.10(a). The information described in this section must be reported using the format of appendix A of this part as a guide.

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Applicable provisions of 40 CFR 63 Subpart A shall apply.


### Applicability

| §63.1(a) | General | (1) Terms used throughout this part are defined in §63.2 or in the Clean Air Act (Act) as amended in 1990, except that individual subparts of this part may include specific definitions in addition to or that supersede definitions in §63.2. 

(2) This part contains national emission standards for hazardous air pollutants (NESHAP) established pursuant to section 112 of the Act as amended November 15, 1990. These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants listed in this part pursuant to section 112(b) of the Act. This section explains the applicability of such standards to sources affected by them. The standards in this part are independent of NESHAP contained in 40 CFR part 61. The NESHAP in part 61 promulgated by signature of the Administrator before November 15, 1990 (i.e., the date of enactment of the Clean Air Act Amendments of 1990) remain in effect until they are amended, if appropriate, and added to this part.

(3) No emission standard or other requirement established under this part shall be interpreted, construed, or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established by the Administrator pursuant to other authority of the Act (section 111, part C or D or any other authority of this Act), or a standard issued under State authority. The Administrator may specify in a specific standard under this part that facilities subject to other provisions under the Act need only comply with the provisions of that standard.

(4)(i) Each relevant standard in this part 63 must identify explicitly whether each provision in this subpart A is or is not included in such relevant standard.

(ii) If a relevant part 63 standard incorporates the requirements of 40 CFR part 60, part 61 or other part 63 standards, the relevant part 63 standard must identify explicitly the applicability of each corresponding part 60, part 61, or other part 63 subpart A (General) provision.

(iii) The General Provisions in this subpart A do not apply to regulations developed pursuant to section 112(r) of the amended Act, unless otherwise specified in those regulations.

(5) [Reserved]

(6) To obtain the most current list of categories of sources to be regulated under section 112 of the Act, or to obtain the most recent regulation promulgation schedule established pursuant to section 112(e) of the Act, contact the Office of the Director, Emission Standards Division, Office of Air Quality Planning and Standards, U.S. EPA (MD-13), Research Triangle Park, North Carolina 27711.

(7)-(9) [Reserved]
§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) Initial applicability determination for this part. (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) Applicability of this part after a relevant standard has been set under this part. (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); and

(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) 

(c) If the Administrator promulgates an emission standard under section 112(d) or (h) of the Act that is applicable to a source subject to an emission limitation by permit established under section 112(j) of the Act, and the requirements under the section 112(j) emission limitation are substantially as effective as the promulgated emission standard, the owner or operator may request the permitting authority to revise the source's title V permit to reflect that the emission limitation in the permit satisfies the requirements of the promulgated emission standard. The process by which the permitting authority determines whether the section 112(j) emission limitation is substantially as effective as the promulgated emission standard must include, consistent with part 70 or 71 of this chapter, the opportunity for full public, EPA, and affected State review (including the opportunity for EPA's objection) prior to the permit revision being finalized. A negative determination by the permitting authority constitutes final action for purposes of review and appeal under the applicable title V operating permit program.

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Applicable provisions of 40 CFR 63 Subpart AAAA shall apply.

[68 FR 2238, Jan. 16, 2003, unless otherwise noted]

**Purpose**

§63.1930  
This subpart establishes national emission standards for hazardous air pollutants for existing and new municipal solid waste (MSW) landfills. This subpart requires all landfills described in §63.1935 to meet the requirements of 40 CFR part 60, subpart Cc or WWW and requires timely control of bioreactors. This subpart also requires such landfills to meet the startup, shutdown, and malfunction (SSM) requirements of the general provisions of this part and provides that compliance with the operating conditions shall be demonstrated by parameter monitoring results that are within the specified ranges. It also includes additional reporting requirements.

**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 §60.754(a) of the MSW landfills new source performance standards in 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan that applies to your landfill.

(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.  

(c) If your landfill is a new affected source and is a major source or is collocated with a major source, you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW.  

(d) If your landfill is an existing affected source and is a major source or is collocated with a major source, you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 13, 2004, whichever occurs later.  

(e) If your landfill is a new affected source and is an area source meeting the criteria in §63.1935(a)(3), you must comply with the requirements of §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW.  

(f) If your landfill is an existing affected source and is an area source meeting the criteria in §63.1935(a)(3), you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 16, 2004, whichever occurs later.

### Exemption

**§63.1950**  
You are no longer required to comply with the requirements of this subpart when you are no longer required to apply controls as specified in 40 CFR 60.752(b)(2)(v) of subpart WWW, or the Federal plan or EPA approved and effective State plan or tribal plan that implements 40 CFR part 60, subpart Cc, whichever applies to your landfill.
§63.1955  (a) You must fulfill one of the requirements in paragraph (a)(1) or (2) of this section, whichever is applicable:

(1) Comply with the requirements of 40 CFR part 60, subpart WWW.

(2) Comply with the requirements of the Federal plan or EPA approved and effective State plan or tribal plan that implements 40 CFR part 60, subpart Cc.

(b) If you are required by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan to install a collection and control system, you must comply with the requirements in §§63.1960 through 63.1985 and with the general provisions of this part specified in table 1 of this subpart.

(c) For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, you must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR part 60 subpart WWW or the Federal plan, or 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 §63.1980(a) and (b), 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.

(d) If you own or operate a bioreactor that is located at a 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 paragraph (a) and the additional requirements in paragraphs (d)(1) and (2) of this section.

(1) You must comply with the general provisions specified in Table 1 of this subpart and §§63.1960 through 63.1985 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, instead of the schedule in 40 CFR 60.752(b)(2)(ii)(A)(2).

Compliance Determination

§63.1960  Compliance is determined in the same way it is determined for 40 CFR part 60, subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), (c)(1), and (d) of subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, you must develop a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). 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.

## 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 40 CFR 60.758(c)(1) of subpart WWW 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)** A deviation occurs when a SSM plan is not developed or maintained on site.


## 3-Hour Block Average Calculation

### §63.1975

Averages are calculated in the same way as they are calculated in 40 CFR part 60, subpart WWW, except that the data collected during the events listed in paragraphs (a), (b), (c), and (d) 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

### §63.1980

(a) Keep records and reports as specified in 40 CFR part 60, subpart WWW, or in the Federal plan, EPA approved State plan or tribal plan that implements 40 CFR part 60, subpart Cc, whichever applies to your landfill, with one exception: You must submit the annual report described in 40 CFR 60.757(f) every 6 months.

(b) You must also keep records and reports as specified in the general provisions of 40 CFR part 60 and this part as shown in Table 1 of this subpart. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports.

(c) For bioreactors at new affected sources you must submit the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) within 180 days after the date you are required to begin operating the gas collection and control system by §63.1947(a)(2) of this subpart.
(d) For bioreactors at existing affected sources, you must submit the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) within 180 days after the compliance date specified in §63.1947(b) of this subpart, unless you have previously submitted a compliance report for the bioreactor required by 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State plan or tribal plan.

(e) For bioreactors that are located at existing affected sources, but do not initiate liquids addition until later than the compliance date in §63.1947(b) of this subpart, you must submit the initial semiannual compliance report and performance tests results described in 40 CFR 60.757(f) within 180 days after the date you are required to begin operating the gas collection and control system by §63.1947(c) of this subpart.

(f) If you must submit a semiannual compliance report for a bioreactor as well as a semiannual compliance report for a conventional portion of the same landfill, you may delay submittal of a subsequent semiannual compliance report for the bioreactor according to paragraphs (f)(1) through (3) of this section so that the reports may be submitted on the same schedule.

(1) After submittal of your initial semiannual compliance report and performance test results for the bioreactor, you may delay submittal of the subsequent semiannual compliance report for the bioreactor until the date the initial or subsequent semiannual compliance report is due for the conventional portion of your landfill.

(2) You may delay submittal of your subsequent semiannual compliance report by no more than 12 months after the due date for submitting the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) for the bioreactor. The report shall cover the time period since the previous semiannual report for the bioreactor, which would be a period of at least 6 months and no more than 12 months.

(3) After the delayed semiannual report, all subsequent semiannual reports for the bioreactor must be submitted every 6 months on the same date the semiannual report for the conventional portion of the landfill is due.

(g) If you add any liquids other than leachate in a controlled fashion to the waste mass and do not comply with the bioreactor requirements in §§63.1947, 63.1955(c) and 63.1980(c) through (f) of this subpart, you must keep a record of calculations showing that the percent moisture by weight expected in the waste mass to which liquid is added is less than 40 percent. The calculation must consider the waste mass, moisture content of the incoming waste, mass of water added to the waste including leachate recirculation and other liquids addition and precipitation, and the mass of water removed through leachate or other water losses. Moisture level sampling or mass balances calculations can be used. You must document the calculations and the basis of any assumptions. Keep the record of the calculations until you cease liquids addition.

(h) If you calculate moisture content to establish the date your bioreactor is required to begin operating the collection and control system under §63.1947(a)(2) or (c)(2), keep a record of the calculations including the information specified in paragraph (g) of this section for 5 years. Within 90 days after the bioreactor achieves 40 percent moisture content, report the results of the calculation, the date the bioreactor achieved 40 percent moisture content by weight, and the date you plan to begin collection and control system operation.
Applicable provisions of 40 CFR 63 Subpart ZZZZ shall apply.

[73 FR 3603, Jan. 18, 2008]

Purpose

§63.6580 Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

Applicability

§63.6585 You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

(f) The emergency stationary RICE listed in paragraphs (f)(1) through (3) of this section are not subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in §63.6675, which includes operating according to the provisions specified in §63.6640(f).
§63.6585  (1) Existing residential emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

(2) Existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

(3) Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

63 Subpart ZZZZ-2

§63.6590  This subpart applies to each affected source.

(a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) Existing stationary RICE.

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) New stationary RICE. (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.
(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(f) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

(i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;
(c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

(2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;

(4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

Compliance Dates

(a) Affected sources. (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.
## Emission Limitations and Operating Limitations: Stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions

### §63.6595

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

### §63.6600

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.
§63.6600  (c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

(d) If you own or operate an existing non-emergency stationary CI RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

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**Emission Limitations: New or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions**

§63.6601  Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

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**Emission Limitations and Other Requirements: Existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions**

§63.6602  If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations and other requirements in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

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**Emission Limitations, Operating Limitations, and Other Requirements: Existing stationary RICE located at an area source of HAP emissions**

§ 63.6603  Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.
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(b) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meets either paragraph (b)(1) or (2) of this section, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. Existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meet either paragraph (b)(1) or (2) of this section must meet the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart.

   (1) The area source is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS).

   (2) The stationary RICE is located at an area source that meets paragraphs (b)(2)(i), (ii), and (iii) of this section.

      (i) The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.

      (ii) At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.

      (iii) The generating capacity of the area source is less than 12 megawatts, or the stationary RICE is used exclusively for backup power for renewable energy.

(c) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located on an offshore vessel that is an area source of HAP and is a nonroad vehicle that is an Outer Continental Shelf (OCS) source as defined in 40 CFR 55.2, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. You must meet all of the following management practices:

   (1) Change oil every 1,000 hours of operation or annually, whichever comes first. Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement.

   (2) Inspect and clean air filters every 750 hours of operation or annually, whichever comes first, and replace as necessary.

   (3) Inspect fuel filters and belts, if installed, every 750 hours of operation or annually, whichever comes first, and replace as necessary.

   (4) Inspect all flexible hoses every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

(d) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and that is subject to an enforceable state or local standard that requires the engine to be replaced no later than June 1, 2018, you may until January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018, choose to comply with the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart instead of the applicable emission limitations in Table 2d, operating limitations in Table 2b, and crankcase ventilation system requirements in §63.6625(g).
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You must comply with the emission limitations in Table 2d and operating limitations in Table 2b that apply for non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018. You must also comply with the crankcase ventilation system requirements in §63.6625(g) by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018.

(e) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under this part by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR part 60 subpart III instead of the emission limitations and other requirements that would otherwise apply under this part for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions.

(f) An existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP must meet the definition of remote stationary RICE in §63.6675 on the initial compliance date for the engine, October 19, 2013, in order to be considered a remote stationary RICE under this subpart. Owners and operators of existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in §63.6675 of this subpart as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.

Fuel Requirements for Stationary CI RICE

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(a) If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.

(b) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(c) Beginning January 1, 2015, if you own or operate a new emergency CI stationary RICE with a site rating of more than 500 brake HP and a displacement of less than 30 liters per cylinder located at a major source of HAP that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(d) Existing CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2), or are on offshore vessels that meet §63.6603(c) are exempt from the requirements of this section.
General Requirements

| § 63.6605 | (a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.  

(b) 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. |

Initial Performance Tests: RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

| § 63.6610 | If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.  

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).  

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).  

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).  

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.  

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.  

(2) The test must not be older than 2 years.  

(3) The test must be reviewed and accepted by the Administrator.  

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.  

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load. |
## Initial Performance Tests: New or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions

| § 63.6611 | If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate. |

## Initial Performance Tests: Existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions

| § 63.6612 | If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.  

(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).  

(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.  

1. The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.  

2. The test must not be older than 2 years.  

3. The test must be reviewed and accepted by the Administrator.  

4. Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes. |

## Subsequent Performance Tests

| § 63.6615 | If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart. |
§ 63.6620  (a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE listed in paragraphs (b)(1) through (4) of this section.

1) Non-emergency 4SRB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

2) New non-emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP located at a major source of HAP emissions.

3) New non-emergency 2SLB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

4) New non-emergency CI stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(c) [Reserved]

(d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in this subpart.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

\[
\frac{C_i - C_o}{C_i} \times 100 = R \quad (Eq. 1)
\]

Where:

- \( C_i \) = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet.
- \( C_o \) = concentration of CO, THC, or formaldehyde at the control device outlet, and
- \( R \) = percent reduction of CO, THC, or formaldehyde emissions.

(2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO\(_2\)). If pollutant concentrations are to be corrected to 15 percent oxygen and CO\(_2\) concentration is measured in lieu of oxygen concentration measurement, a CO\(_2\) correction factor is needed. Calculate the CO\(_2\) correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific \( F_o \) value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

\[
F_o = \frac{0.209 F_d}{F_c} \quad (Eq. 2)
\]
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Where:

\( F_0 \) = Fuel factor based on the ratio of oxygen volume to the ultimate CO\(_2\) volume produced by the fuel at zero percent excess air.

\( 0.209 \) = Fraction of air that is oxygen, percent/100.

\( F_d \) = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm\(^3\)/J (dscf/106 Btu).

\( F_c \) = Ratio of the volume of CO\(_2\) produced to the gross calorific value of the fuel from Method 19, dsm\(^3\)/J (dscf/106 Btu)

(ii) Calculate the CO\(_2\) correction factor for correcting measurement data to 15 percent O\(_2\), as follows:

\[
X_{CO2} = \frac{5.9}{F_0} \quad \text{(Eq. 3)}
\]

Where:

\( X_{CO2} \) = CO\(_2\) correction factor, percent.

\( 5.9 \) = 20.9 percent O\(_2\) — 15 percent O\(_2\), the defined O\(_2\) correction value, percent.

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O\(_2\) using CO\(_2\) as follows:

\[
C_{adj} = C_d \frac{X_{CO2}}{5} \quad \text{(Eq. 4)}
\]

Where:

\( C_{adj} \) = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O\(_2\).

\( C_d \) = Measured concentration of CO, THC, or formaldehyde, uncorrected.

\( X_{CO2} \) = CO\(_2\) correction factor, percent.

\( \%CO2 \) = Measured CO\(_2\) concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (e.g., operator adjustment, automatic controller adjustment, etc.) or unintentionally (e.g., wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.
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(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either O₂ or CO₂ according to the requirements in paragraphs (a)(1) through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO₂ concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section. For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in paragraph (b) of this section are applicable September 6, 2011.

(1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in §63.8(d). As specified in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (b)(1) through (5) of this section in your site-specific monitoring plan.

(i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

(ii) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;

(iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;

(iv) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (c)(3); and

(v) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).

(2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.
(3) The CPMS must collect data at least once every 15 minutes (see also §63.6635).

(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

(6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary 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:

(1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;

(2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

(4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;

(5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;

(6) An existing non-emergency, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.

(7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;
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(9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and

(10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2) do not have to meet the requirements of this paragraph (g). Existing CI engines located on offshore vessels that meet §63.6603(c) do not have to meet the requirements of this paragraph (g).

(1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

(2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.

(h) If you operate a new, reconstructed, or existing stationary engine, 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, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. 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.
§ 63.6625  (j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. 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.

Initial Compliance Demonstration

§ 63.6630  (a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

(d) Non-emergency 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more can demonstrate initial compliance with the formaldehyde emission limit by testing for THC instead of formaldehyde. The testing must be conducted according to the requirements in Table 4 of this subpart. The average reduction of emissions of THC determined from the performance test must be equal to or greater than 30 percent.

(e) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

1. The compliance demonstration must consist of at least three test runs.

2. Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.
§ 63.6630  (3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O₂ using one of the O₂ measurement methods specified in Table 4 of this subpart. Measurements to determine O₂ concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O₂ emissions simultaneously at the inlet and outlet of the control device.

Continuous Compliance Demonstration: Monitor and Data Collection

§ 63.6635  (a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

Continuous Compliance Demonstration: Emission Limitations, Operating Limitations, and Other Requirements

§ 63.6640  (a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.
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(c) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

1. The compliance demonstration must consist of at least one test run.

2. Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

3. If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

4. If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

5. You must measure O2 using one of the O2 measurement methods specified in Table 4 of this subpart. Measurements to determine O2 concentration must be made at the same time as the measurements for CO or THC concentration.

6. If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O2 emissions simultaneously at the inlet and outlet of the control device.

7. If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of this subpart, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of this subpart. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of this subpart.

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.
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If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
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(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

Notifications, Reports, and Records

§ 63.6645

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following:

1. An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

2. An existing stationary RICE located at an area source of HAP emissions.

3. A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

4. A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

5. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.
(b) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

(i) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and subject to an enforceable state or local standard requiring engine replacement and you intend to meet management practices rather than emission limits, as specified in §63.6603(d), you must submit a notification by March 3, 2013, stating that you intend to use the provision in §63.6603(d) and identifying the state or local regulation that the engine is subject to.
Reporting Requirements

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(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
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(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.
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(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

(h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
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(v) Hours operated for the purposes specified in §63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(viii) If there were no deviations from the fuel requirements in §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

(ix) If there were deviations from the fuel requirements in §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA’s Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13.

Record Retention

§63.6655

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency RICE.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine 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 §63.6640(f)(2)(ii) or (iii) or §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.

(1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.
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. |
(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.

(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.

(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.

(ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in §63.7(f).


(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, see §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.e., 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.

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<table>
<thead>
<tr>
<th>§63.11125</th>
</tr>
</thead>
</table>

(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 (e.g., 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.e., 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.

<table>
<thead>
<tr>
<th>§63.11126</th>
</tr>
</thead>
</table>
| (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. |

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### General Provisions

#### §63.11132

**Table 1 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More**¹

<table>
<thead>
<tr>
<th>If you own or operate</th>
<th>Then you must</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A new, reconstructed, or existing GDF subject to §63.11118</td>
<td>Install and operate a vapor balance system on your gasoline storage tanks that meets the design criteria in paragraphs (a) through (h).</td>
</tr>
<tr>
<td></td>
<td>(a) All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnect.</td>
</tr>
<tr>
<td></td>
<td>(b) The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor-tight, as defined in §63.11132.</td>
</tr>
<tr>
<td></td>
<td>(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.</td>
</tr>
<tr>
<td></td>
<td>(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.</td>
</tr>
<tr>
<td></td>
<td>(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).</td>
</tr>
<tr>
<td></td>
<td>(f) Liquid fill connections for all systems shall be equipped with vapor-tight caps.</td>
</tr>
<tr>
<td></td>
<td>(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.</td>
</tr>
<tr>
<td></td>
<td>(h) The vapor balance system shall be capable of meeting the static pressure performance requirement of the following equation:</td>
</tr>
<tr>
<td></td>
<td>[ Pf = 2e^{-500.887/v} ]</td>
</tr>
<tr>
<td></td>
<td>Where:</td>
</tr>
<tr>
<td></td>
<td>Pf = Minimum allowable final pressure, inches of water.</td>
</tr>
<tr>
<td></td>
<td>( v ) = Total ullage affected by the test, gallons.</td>
</tr>
<tr>
<td></td>
<td>( e ) = Dimensionless constant equal to approximately 2.718.</td>
</tr>
<tr>
<td></td>
<td>2 = The initial pressure, inches water.</td>
</tr>
<tr>
<td>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</td>
<td>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.</td>
</tr>
</tbody>
</table>
The 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

<table>
<thead>
<tr>
<th>If you own or operate</th>
<th>Then you must</th>
</tr>
</thead>
<tbody>
<tr>
<td>A gasoline cargo tank</td>
<td>Not unload gasoline into a storage tank at a GDF subject to the control requirements in this subpart unless the following conditions are met:</td>
</tr>
<tr>
<td></td>
<td>(i) All hoses in the vapor balance system are properly connected,</td>
</tr>
<tr>
<td></td>
<td>(ii) The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect,</td>
</tr>
<tr>
<td></td>
<td>(iii) All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight,</td>
</tr>
<tr>
<td></td>
<td>(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</td>
</tr>
<tr>
<td></td>
<td>(v) All hatches on the tank truck are closed and securely fastened.</td>
</tr>
<tr>
<td></td>
<td>(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).</td>
</tr>
</tbody>
</table>

Table 3 to Subpart CCCCCC of Part 63—Applicability of General Provisions

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Brief description</th>
<th>Applies to subpart CCCCCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.1</td>
<td>Applicability</td>
<td>Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications</td>
<td>Yes, specific requirements given in §63.11111.</td>
</tr>
<tr>
<td>§63.1(c)(2)</td>
<td>Title V Permit</td>
<td>Requirements for obtaining a title V permit from the applicable permitting authority</td>
<td>Yes, §63.11111(f) of subpart CCCCCC exempts identified area sources from the obligation to obtain title V operating permits.</td>
</tr>
<tr>
<td>§63.2</td>
<td>Definitions</td>
<td>Definitions for part 63 standards</td>
<td>Yes, additional definitions in §63.11132.</td>
</tr>
<tr>
<td>§63.3</td>
<td>Units and Abbreviations</td>
<td>Units and abbreviations for part 63 standards</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.4</td>
<td>Prohibited Activities and Circumvention</td>
<td>Prohibited activities; Circumvention, severability</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.5</td>
<td>Construction/Reconstruction</td>
<td>Applicability; applications; approvals</td>
<td>Yes, except that these notifications are not required for facilities subject to §63.11116</td>
</tr>
<tr>
<td>§63.6(a)</td>
<td>Compliance with Standards/Operation &amp; Maintenance—Applicability</td>
<td>General Provisions apply unless compliance extension; General Provisions apply to area sources that become major</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(1)-(4)</td>
<td>Compliance Dates for New and Reconstructed Sources</td>
<td>Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for CAA section 112(f)</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(5)</td>
<td>Notification</td>
<td>Must notify if commenced construction or reconstruction after proposal</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(6)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(7)</td>
<td>Compliance Dates for New and Reconstructed Area Sources That Become Major</td>
<td>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</td>
<td>No.</td>
</tr>
<tr>
<td>§63.6(c)(1)-(2)</td>
<td>Compliance Dates for Existing Sources</td>
<td>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</td>
<td>No. §63.11113 specifies the compliance dates.</td>
</tr>
<tr>
<td>§63.6(c)(3)-(4)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(c)(5)</td>
<td>Compliance Dates for Existing Area Sources That Become Major</td>
<td>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)</td>
<td>No.</td>
</tr>
<tr>
<td>§63.6(d)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(e)(1)(i)</td>
<td>General duty to minimize emissions</td>
<td>Operate to minimize emissions at all times; information Administrator will use to determine if operation and maintenance requirements were met.</td>
<td>No. See §63.11115 for general duty requirement.</td>
</tr>
<tr>
<td>§63.6(e)(1)(ii)</td>
<td>Requirement to correct malfunctions ASAP</td>
<td>Owner or operator must correct malfunctions as soon as possible.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.6(e)(2)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(e)(3)</td>
<td>Startup, Shutdown, and Malfunction (SSM) Plan</td>
<td>Requirement for SSM plan; content of SSM plan; actions during SSM</td>
<td>No.</td>
</tr>
<tr>
<td>§63.6(f)(1)</td>
<td>Compliance Except During SSM</td>
<td>You must comply with emission standards at all times except during SSM</td>
<td>No.</td>
</tr>
<tr>
<td>§63.6(f)(2)-(3)</td>
<td>Methods for Determining</td>
<td>Compliance based on performance test,</td>
<td>Yes.</td>
</tr>
<tr>
<td>Section</td>
<td>Compliance</td>
<td>Operation and maintenance plans, records, inspection</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>------------</td>
<td>-----------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>§63.6(g)(1)-(3) Alternative Standard</td>
<td>Procedures for getting an alternative standard</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(1) Compliance with Opacity/Visible Emission (VE) Standards</td>
<td>You must comply with opacity/VE standards at all times except during SSM</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(2)(i) Determining Compliance with Opacity/VE Standards</td>
<td>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</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(2)(ii) [Reserved]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(2)(iii) Using Previous Tests To Demonstrate Compliance With Opacity/VE Standards</td>
<td>Criteria for when previous opacity/VE testing can be used to show compliance with this subpart</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(3) [Reserved]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(4) Notification of Opacity/VE Observation Date</td>
<td>Must notify Administrator of anticipated date of observation</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(5)(i), (iii)-(v) Conducting Opacity/VE Observations</td>
<td>Dates and schedule for conducting opacity/VE observations</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(5)(ii) Opacity Test Duration and Averaging Times</td>
<td>Must have at least 3 hours of observation with 30 6-minute averages</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(6) Records of Conditions During Opacity/VE Observations</td>
<td>Must keep records available and allow Administrator to inspect</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(7)(i) Report Continuous Opacity Monitoring System (COMS) Monitoring Data From Performance Test</td>
<td>Must submit COMS data with other performance test data</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(7)(ii) Using COMS Instead of EPA Method 9</td>
<td>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</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(7)(iii) Averaging Time for COMS During Performance Test</td>
<td>To determine compliance, must reduce COMS data to 6-minute averages</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(7)(iv) COMS Requirements</td>
<td>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)</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(7)(v) Determining Compliance with Opacity/VE Standards</td>
<td>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</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
<td>Details</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(8)</td>
<td>Determining Compliance with Opacity/VE Standards</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>§63.6(h)(9)</td>
<td>Adjusted Opacity Standard</td>
<td>Procedures for Administrator to adjust an opacity standard. No.</td>
<td></td>
</tr>
<tr>
<td>§63.6(i)(1)-(14)</td>
<td>Compliance Extension</td>
<td>Procedures and criteria for Administrator to grant compliance extension. Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.6(j)</td>
<td>Presidential Compliance Exemption</td>
<td>President may exempt any source from requirement to comply with this subpart. Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(a)(2)</td>
<td>Performance Test Dates</td>
<td>Dates for conducting initial performance testing; must conduct 180 days after compliance date. Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(a)(3)</td>
<td>CAA Section 114 Authority</td>
<td>Administrator may require a performance test under CAA section 114 at any time. Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(b)(1)</td>
<td>Notification of Performance Test</td>
<td>Must notify Administrator 60 days before the test. Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(b)(2)</td>
<td>Notification of Re-scheduling</td>
<td>If have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay. Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(c)</td>
<td>Quality Assurance (QA)/Test Plan</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>§63.7(d)</td>
<td>Testing Facilities</td>
<td>Requirements for testing facilities. Yes.</td>
<td></td>
</tr>
<tr>
<td>63.7(e)(1)</td>
<td>Conditions for Conducting Performance Tests</td>
<td>Performance test must be conducted under representative conditions. No, §63.11120(c) specifies conditions for conducting performance tests.</td>
<td></td>
</tr>
<tr>
<td>§63.7(e)(2)</td>
<td>Conditions for Conducting Performance Tests</td>
<td>Must conduct according to this subpart and EPA test methods unless Administrator approves alternative. Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(e)(3)</td>
<td>Test Run Duration</td>
<td>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 test run can be used. Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.7(f)</td>
<td>Alternative Test Method</td>
<td>Procedures by which Administrator can grant approval to use an intermediate or alternative test method. Yes.</td>
<td></td>
</tr>
<tr>
<td>Section</td>
<td>Requirement</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>§63.7(g)</td>
<td>Performance Test Data Analysis</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>§63.7(h)</td>
<td>Waiver of Tests</td>
<td>Procedures for Administrator to waive performance test.</td>
<td></td>
</tr>
<tr>
<td>§63.8(a)(1)</td>
<td>Applicability of Monitoring Requirements</td>
<td>Subject to all monitoring requirements in standard.</td>
<td></td>
</tr>
<tr>
<td>§63.8(a)(2)</td>
<td>Performance Specifications</td>
<td>Performance Specifications in appendix B of 40 CFR part 60 apply.</td>
<td></td>
</tr>
<tr>
<td>§63.8(a)(3)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.8(a)(4)</td>
<td>Monitoring of Flares</td>
<td>Monitoring requirements for flares in §63.11 apply.</td>
<td></td>
</tr>
<tr>
<td>§63.8(b)(1)</td>
<td>Monitoring</td>
<td>Must conduct monitoring according to standard unless Administrator approves alternative.</td>
<td></td>
</tr>
<tr>
<td>§63.8(b)(2)-(3)</td>
<td>Multiple Effluents and Multiple Monitoring Systems</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(1)</td>
<td>Monitoring System Operation and Maintenance</td>
<td>Maintain monitoring system in a manner consistent with good air pollution control practices.</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(1)(i)-(iii)</td>
<td>Operation and Maintenance of Continuous Monitoring Systems (CMS)</td>
<td>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).</td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(2)-(8)</td>
<td>CMS Requirements</td>
<td>Must install to get representative emission or parameter measurements; must verify operational status before or at performance test.</td>
<td></td>
</tr>
<tr>
<td>§63.8(d)</td>
<td>CMS Quality Control</td>
<td>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 revisions.</td>
<td></td>
</tr>
<tr>
<td>§63.8(e)</td>
<td>CMS Performance Evaluation</td>
<td>Notification, performance evaluation test plan, reports.</td>
<td></td>
</tr>
<tr>
<td>§63.8(f)(1)-(5)</td>
<td>Alternative Monitoring Method</td>
<td>Procedures for Administrator to approve alternative monitoring</td>
<td>No.</td>
</tr>
<tr>
<td>§63.8(f)(6)</td>
<td>Alternative to Relative Accuracy Test</td>
<td>Procedures for Administrator to approve alternative relative accuracy tests for continuous emissions monitoring system (CEMS)</td>
<td>No.</td>
</tr>
<tr>
<td>§63.8(g)</td>
<td>Data Reduction</td>
<td>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</td>
<td>No.</td>
</tr>
<tr>
<td>§63.9(a)</td>
<td>Notification Requirements</td>
<td>Applicability and State delegation</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.9(b)(1)-(2), (4)-(5)</td>
<td>Initial Notifications</td>
<td>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</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.9(c)</td>
<td>Request for Compliance Extension</td>
<td>Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.9(d)</td>
<td>Notification of Special Compliance Requirements for New Sources</td>
<td>For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.9(e)</td>
<td>Notification of Performance Test</td>
<td>Notify Administrator 60 days prior</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.9(f)</td>
<td>Notification of VE/Opacity Test</td>
<td>Notify Administrator 30 days prior</td>
<td>No.</td>
</tr>
<tr>
<td>§63.9(g)</td>
<td>Additional Notifications when Using CMS</td>
<td>Notification of performance evaluation; notification about use of COMS data; notification that exceeded criterion for relative accuracy alternative</td>
<td>Yes, however, there are no opacity standards.</td>
</tr>
<tr>
<td>§63.9(h)(1)-(6)</td>
<td>Notification of Compliance Status</td>
<td>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</td>
<td>Yes, however, there are no opacity standards.</td>
</tr>
<tr>
<td>§63.9(i)</td>
<td>Adjustment of Submittal Deadlines</td>
<td>Procedures for Administrator to approve change when notifications must be submitted</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.9(j)</td>
<td>Change in Previous Information</td>
<td>Must submit within 15 days after the change</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(a)</td>
<td>Recordkeeping/Reporting</td>
<td>Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(b)(1)</td>
<td>Recordkeeping/Reporting</td>
<td>General requirements; keep all records readily available; keep for 5 years</td>
<td>Yes.</td>
</tr>
<tr>
<td>Regulation</td>
<td>Description</td>
<td>Requirement</td>
<td>Yes/No/No.</td>
</tr>
<tr>
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<td>------------------------------------------------------------------------------</td>
<td>-------------------------------------------</td>
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</tr>
<tr>
<td>§63.10(b)(2)(i)</td>
<td>Records related to SSM Recordkeeping of occurrence and duration of startups and shutdowns</td>
<td>No. See §63.11125(d) for recordkeeping of (1) occurrence and duration and (2) actions taken during malfunction.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.10(b)(2)(ii)</td>
<td>Records related to SSM Recordkeeping of malfunctions</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.10(b)(2)(iii)</td>
<td>Maintenance records Recordkeeping of maintenance on air pollution control and monitoring equipment</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(b)(2)(iv)</td>
<td>Records Related to SSM Actions taken to minimize emissions during SSM</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.10(b)(2)(v)</td>
<td>Records Related to SSM Actions taken to minimize emissions during SSM</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.10(b)(2)(vi)- (xi)</td>
<td>CMS Records Malfunctions, inoperative, out-of-control periods</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.10(b)(2)(xii)</td>
<td>Records Records when under waiver</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(b)(2)(xiii)</td>
<td>Records Records when using alternative to relative accuracy test</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(b)(2)(xiv)</td>
<td>Records All documentation supporting Initial Notification and Notification of Compliance Status</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(b)(3)</td>
<td>Records Applicability determinations</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(c)</td>
<td>Records Additional records for CMS</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.10(d)(1)</td>
<td>General Reporting Requirements Requirement to report</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(d)(2)</td>
<td>Report of Performance Test Results When to submit to Federal or State authority</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(d)(3)</td>
<td>Reporting Opacity or VE Observations What to report and when</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.10(d)(4)</td>
<td>Progress Reports Must submit progress reports on schedule if under compliance extension</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(d)(5)</td>
<td>SSM Reports Contents and submission</td>
<td>No. See §63.11126(b) for malfunction reporting requirements.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.10(e)(1)-(2)</td>
<td>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</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.10(e)(3)(i)-(iii)</td>
<td>Reports Schedule for reporting excess emissions</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.10(e)(3)(iv)-(v)</td>
<td>Excess Emissions Reports</td>
<td>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)</td>
<td>No.</td>
</tr>
<tr>
<td>§63.10(e)(3)(iv)-(v)</td>
<td>Excess Emissions Reports</td>
<td>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)</td>
<td>No.</td>
</tr>
<tr>
<td>§63.10(e)(3)(vi)-(viii)</td>
<td>Excess Emissions Report and Summary Report</td>
<td>Requirements for reporting excess emissions for CMS; requires all of the information in §§63.10(c)(5)-(13) and 63.8(c)(7)-(8)</td>
<td>No.</td>
</tr>
<tr>
<td>§63.10(e)(4)</td>
<td>Reporting COMS Data</td>
<td>Must submit COMS data with performance test data</td>
<td>No.</td>
</tr>
<tr>
<td>§63.10(f)</td>
<td>Waiver for Recordkeeping/Reporting</td>
<td>Procedures for Administrator to waive</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.11(b)</td>
<td>Flares</td>
<td>Requirements for flares</td>
<td>No.</td>
</tr>
<tr>
<td>§63.12</td>
<td>Delegation</td>
<td>State authority to enforce standards</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.13</td>
<td>Addresses</td>
<td>Addresses where reports, notifications, and requests are sent</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.14</td>
<td>Incorporations by Reference</td>
<td>Test methods incorporated by reference</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.15</td>
<td>Availability of Information</td>
<td>Public and confidential information</td>
<td>Yes.</td>
</tr>
</tbody>
</table>
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%.
U.S. Borax Inc. Version 2011

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

Appx A-3
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 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

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 x 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:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Maximum Emission Limit (lbs/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter</td>
<td>14.0</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>446.0</td>
</tr>
</tbody>
</table>

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\textsubscript{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\textsubscript{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\textsubscript{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\textsubscript{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\textsubscript{X} concentration. The system shall meet EPA monitoring performance specifications (40 CFR 60.13 and 40 CFR 60, Appendix B, Performance Specification 2).


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 NOX, 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 NOX, 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)

<table>
<thead>
<tr>
<th>Emissions Unit Equipment No.</th>
<th>1004001</th>
<th>Primary Crusher A PCC-DC-100</th>
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<tr>
<td><strong>Controlled Emissions</strong></td>
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<td></td>
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<tr>
<td><strong>Pollutant</strong></td>
<td>PM\textsubscript{10}</td>
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<td><strong>Monitoring Procedures</strong></td>
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<tr>
<td><strong>Monitoring Ranges</strong></td>
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<tr>
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<td><strong>Monitoring Ranges</strong></td>
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## Emissions Unit Equipment No. 1004002 DIS-DC-101

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<tr>
<td>Emissions Unit Equipment No.</td>
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<tr>
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</tr>
<tr>
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Appx B-5
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### Emissions Unit Equipment No. 1004007 and 1004083  
**SHP-DC-118**

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**Control Equipment**  
Fabric Collector

**Monitoring Ranges**  
Visible Emissions shall be less than 20% opacity.

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### Emissions Unit Equipment No. 1004008 and 1004071  
**SHP-DC-119**

<table>
<thead>
<tr>
<th>Equipment Description</th>
<th>Uncontrolled Emissions</th>
<th>Controlled Emissions</th>
<th>Monitoring Procedures</th>
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<tbody>
<tr>
<td>5 Mol Railcar Loadout</td>
<td>PM$_{10}$</td>
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<tr>
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<td>23090</td>
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**Control Equipment**  
Fabric Collector

**Monitoring Ranges**  
Visible Emissions shall be less than 20% opacity.
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<tr>
<th>Emissions Unit Equipment No.</th>
<th>1004009</th>
<th>PPK-DC-500</th>
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<tr>
<td><strong>Equipment Description</strong></td>
<td>5/10 Mol Packing and Powder Mill Operations</td>
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<tr>
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<td>Pollutant</td>
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<tr>
<td>PM$_{10}$</td>
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<tr>
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<td>Pollutant</td>
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<td>PM$_{10}$</td>
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<tr>
<td><strong>Monitoring Ranges</strong></td>
<td>Visible Emissions not to exceed 5% Opacity or Ringelmann ¼</td>
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<tr>
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<td><strong>Uncontrolled Emissions</strong></td>
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<tr>
<td><strong>Monitoring Ranges</strong></td>
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<tr>
<td>Emissions Unit Equipment No.</td>
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<td>ABX-DC-163</td>
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<tr>
<td>Equipment Description</td>
<td>5 Mol Furnace Feed</td>
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<table>
<thead>
<tr>
<th>Emissions Unit Equipment No.</th>
<th>1004012, ‘013, ‘014, ‘015 and ‘016</th>
<th>234-DC-301</th>
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<td>Equipment Description</td>
<td>10 Mol Dryers</td>
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<tr>
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<td>PM$_{10}$</td>
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<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<tr>
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<td>PM$_{10}$</td>
<td>4.16</td>
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Appx B-9
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<tr>
<th>Emissions Unit Equipment No.</th>
<th>1004016</th>
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<tbody>
<tr>
<td><strong>Equipment Description</strong></td>
<td>10 Mol Crushing/Screening Operation</td>
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<td><strong>Uncontrolled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td>10 Mol Crushing/Screening Operation</td>
<td>PM$_{10}$</td>
<td>490</td>
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<td>Fabric Collectors</td>
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<tr>
<td><strong>Controlled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td>10 Mol Crushing/Screening Operation</td>
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<tr>
<td><strong>Monitoring Ranges</strong></td>
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<table>
<thead>
<tr>
<th>Emissions Unit Equipment No.</th>
<th>1004016</th>
<th>234-DC-303</th>
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<tbody>
<tr>
<td><strong>Equipment Description</strong></td>
<td>10 Mol Crushing/Screening Operation</td>
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</tr>
<tr>
<td><strong>Uncontrolled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td>10 Mol Crushing/Screening Operation</td>
<td>PM$_{10}$</td>
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<tr>
<td><strong>Control Equipment</strong></td>
<td>Fabric Collectors</td>
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<tr>
<td><strong>Controlled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td>10 Mol Crushing/Screening Operation</td>
<td>PM$_{10}$</td>
<td>0.49</td>
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<tr>
<td><strong>Monitoring Procedures</strong></td>
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<tr>
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### Emissions Unit Details

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<th>1004016</th>
<th>234-DC-304</th>
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</thead>
<tbody>
<tr>
<td><strong>Equipment Description</strong></td>
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</tr>
<tr>
<td><strong>Uncontrolled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<tr>
<td>PM$_{10}$</td>
<td>490</td>
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</tr>
<tr>
<td><strong>Control Equipment</strong></td>
<td>Fabric Collectors</td>
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<tr>
<td><strong>Controlled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>0.49</td>
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<tr>
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### Additional Details

- Pollutant: PM$_{10}$
- Potential to Emit: 490 tons/year
- Controlled Equipment: Fabric Collectors
- 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.
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<tr>
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<th>234-DC-306</th>
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</thead>
<tbody>
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<tr>
<td><strong>Uncontrolled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td><strong>Pollutant</strong></td>
<td>PM$_{10}$</td>
<td>490</td>
</tr>
<tr>
<td><strong>Control Equipment</strong></td>
<td>Fabric Collectors</td>
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<td><strong>Controlled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<tr>
<td><strong>Pollutant</strong></td>
<td>PM$_{10}$</td>
<td>0.49</td>
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<td><strong>Monitoring Procedures</strong></td>
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<th>1004016</th>
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<tbody>
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</tr>
<tr>
<td><strong>Uncontrolled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<tr>
<td><strong>Pollutant</strong></td>
<td>PM$_{10}$</td>
<td>4160</td>
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<td><strong>Control Equipment</strong></td>
<td>Fabric Collectors</td>
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<tr>
<td><strong>Controlled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td><strong>Pollutant</strong></td>
<td>PM$_{10}$</td>
<td>4.16</td>
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<td><strong>Monitoring Procedures</strong></td>
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Appx B-12
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<tr>
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<td>TMS-DC-081</td>
<td>10 Mol Railcar Loadout</td>
<td>PPK-DC-100</td>
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<th>Monitoring Procedures</th>
<th>Monitoring Ranges</th>
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<tbody>
<tr>
<td>10 Mol Railcar Loadout</td>
<td>PM\textsubscript{10}</td>
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<td>PM\textsubscript{10}</td>
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<td>10 Mol Packing</td>
<td>PM\textsubscript{10}</td>
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<td>Fabric Collectors</td>
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<th>Pollutant</th>
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Appx B-13
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<td>Pollutant PM$_{10}$</td>
<td>Potential to Emit (tons/year) 1.13</td>
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<table>
<thead>
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<th>ABX-DC-169</th>
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<tbody>
<tr>
<td><strong>Equipment Description</strong></td>
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<tr>
<td><strong>Control Equipment</strong></td>
<td>Fabric Collector and Scrubber</td>
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<tr>
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<td>Pollutant PM$_{10}$</td>
<td>Potential to Emit (tons/year) 1.13</td>
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<td>Scrubber 200027</td>
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<td><strong>Equipment Description</strong></td>
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<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<th>ABX-DC-083</th>
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<tr>
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<td>ABX Line 7 cooling, milling, screening</td>
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<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
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<td>Pollutant</td>
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### Emissions Unit

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<th>Equipment Description</th>
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<th>Controlled Emissions</th>
<th>Monitoring Procedures</th>
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<tbody>
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<td>ABX Line 7 cooling, milling, screening</td>
<td>PM$_{10}$</td>
<td>PM$_{10}$</td>
<td>Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.</td>
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<tr>
<td>1004029, 1004110</td>
<td>ABX Screening/Loadout West and Upper East</td>
<td>PM$_{10}$</td>
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### Control Equipment

<table>
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<tr>
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<th>Equipment Description</th>
<th>Pollutant</th>
<th>Potential to Emit (tons/year)</th>
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<tbody>
<tr>
<td>1004028</td>
<td>Fabric Collector and Scrubber</td>
<td>PM$_{10}$</td>
<td>2455</td>
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<tr>
<td>1004029, 1004110</td>
<td>Fabric Collector</td>
<td>PM$_{10}$</td>
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### Monitoring Ranges

- Visible Emissions shall be less than 7% opacity.
- Visible Emissions not to exceed 5% Opacity or Ringelmann ¼
### Emissions Unit Equipment No. 1004030 and 1004110 BLK-DC-201

<table>
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<th>Uncontrolled Emissions</th>
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<th>Potential to Emit (tons/year)</th>
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<tbody>
<tr>
<td>ABX Screening/Loadout Lower East</td>
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**Control Equipment**

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<tr>
<th>Equipment Description</th>
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<th>Pollutant</th>
<th>Potential to Emit (tons/year)</th>
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<tbody>
<tr>
<td>Fabric Collector</td>
<td>PM$_{10}$</td>
<td>9.44</td>
<td></td>
</tr>
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</table>

**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

<table>
<thead>
<tr>
<th>Equipment Description</th>
<th>Uncontrolled Emissions</th>
<th>Pollutant</th>
<th>Potential to Emit (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABX Packing</td>
<td>PM$_{10}$</td>
<td>640</td>
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**Control Equipment**

<table>
<thead>
<tr>
<th>Equipment Description</th>
<th>Controlled Emissions</th>
<th>Pollutant</th>
<th>Potential to Emit (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabric Collector</td>
<td>PM$_{10}$</td>
<td>0.64</td>
<td></td>
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**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.

---

Appx B-17
<table>
<thead>
<tr>
<th>Emissions Unit Equipment No.</th>
<th>1004032</th>
<th>ABA-DC-048 (ABA-DC-142)</th>
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<tbody>
<tr>
<td>Equipment Description</td>
<td>Fusing Plant(s) and Anhydrous Boric Acid Plant</td>
<td></td>
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<tr>
<td>Uncontrolled Emissions</td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<tr>
<td>PM$_{10}$</td>
<td>220</td>
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<td>Fabric Collectors</td>
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<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<td>Monitoring Ranges</td>
<td>Visible Emissions not to exceed 10% opacity or Ringelmann ½.</td>
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<thead>
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<td>Equipment Description</td>
<td>Fusing Plant(s) and Anhydrous Boric Acid Plant</td>
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<tr>
<td>Uncontrolled Emissions</td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<td>Fabric Collectors</td>
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<td>PM$_{10}$</td>
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<td>ABA-DC-051</td>
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<tr>
<td><strong>Equipment Description</strong></td>
<td>Fusing Plant(s) and Anhydrous Boric Acid Plant</td>
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<tr>
<td><strong>Uncontrolled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td></td>
<td>PM$_{10}$</td>
<td>111</td>
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<tr>
<td><strong>Control Equipment</strong></td>
<td>Fabric Collectors</td>
<td></td>
</tr>
<tr>
<td><strong>Controlled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<tr>
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<td>PM$_{10}$</td>
<td>.111</td>
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<tr>
<td><strong>Monitoring Procedures</strong></td>
<td>Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.</td>
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<tr>
<td><strong>Uncontrolled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td></td>
<td>PM$_{10}$</td>
<td>111</td>
</tr>
<tr>
<td><strong>Control Equipment</strong></td>
<td>Fabric Collectors</td>
<td></td>
</tr>
<tr>
<td><strong>Controlled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td></td>
<td>PM$_{10}$</td>
<td>.111</td>
</tr>
<tr>
<td><strong>Monitoring Procedures</strong></td>
<td>Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.</td>
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<tr>
<td><strong>Monitoring Ranges</strong></td>
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<td>ABA-DC-062</td>
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<tr>
<td><strong>Equipment Description</strong></td>
<td>Fusing Plant(s) and Anhydrous Boric Acid Plant</td>
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<tr>
<td><strong>Uncontrolled Emissions</strong></td>
<td>Pollutant</td>
<td></td>
</tr>
<tr>
<td><strong>Pollutant</strong></td>
<td>PM$_{10}$</td>
<td></td>
</tr>
<tr>
<td><strong>Potential to Emit</strong></td>
<td>111 tons/year</td>
<td></td>
</tr>
<tr>
<td><strong>Control Equipment</strong></td>
<td>Fabric Collectors</td>
<td></td>
</tr>
<tr>
<td><strong>Controlled Emissions</strong></td>
<td>Pollutant</td>
<td></td>
</tr>
<tr>
<td><strong>Pollutant</strong></td>
<td>PM$_{10}$</td>
<td></td>
</tr>
<tr>
<td><strong>Potential to Emit</strong></td>
<td>0.111 tons/year</td>
<td></td>
</tr>
<tr>
<td><strong>Monitoring Procedures</strong></td>
<td>Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.</td>
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<th>1004049</th>
<th>DIS-DC-067</th>
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<tbody>
<tr>
<td><strong>Equipment Description</strong></td>
<td>Soda Ash Receiving/Storage/Handling</td>
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<td><strong>Uncontrolled Emissions</strong></td>
<td>Pollutant</td>
<td></td>
</tr>
<tr>
<td><strong>Pollutant</strong></td>
<td>PM$_{10}$</td>
<td></td>
</tr>
<tr>
<td><strong>Potential to Emit</strong></td>
<td>640 tons/year</td>
<td></td>
</tr>
<tr>
<td><strong>Control Equipment</strong></td>
<td>Fabric Collector</td>
<td></td>
</tr>
<tr>
<td><strong>Controlled Emissions</strong></td>
<td>Pollutant</td>
<td></td>
</tr>
<tr>
<td><strong>Pollutant</strong></td>
<td>PM$_{10}$</td>
<td></td>
</tr>
<tr>
<td><strong>Potential to Emit</strong></td>
<td>0.64 tons/year</td>
<td></td>
</tr>
<tr>
<td><strong>Monitoring Procedures</strong></td>
<td>Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.</td>
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## Emissions Unit

### Equipment No.

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<tr>
<th>Equipment No.</th>
<th>1004050</th>
<th>234-DC-112</th>
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</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>5 Mol Fines Receiving/Storage/Handling</th>
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#### Uncontrolled Emissions

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Potential to Emit (tons/year)</th>
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</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>3060</td>
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#### Control Equipment

<table>
<thead>
<tr>
<th>Fabric Collector</th>
</tr>
</thead>
</table>

#### Controlled Emissions

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Potential to Emit (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>3.06</td>
</tr>
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</table>

#### 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

<table>
<thead>
<tr>
<th>Equipment No.</th>
<th>1004059 &amp; USEPA Permit PSD SE 78-02</th>
<th>BAP-DC-135 (Scrubber)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Boric Acid Secondary Crusher &amp; Ore Feed System</th>
</tr>
</thead>
</table>

#### Uncontrolled Emissions

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Potential to Emit (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>8020</td>
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</table>

#### Control Equipment

<table>
<thead>
<tr>
<th>Fabric Collector and Scrubber</th>
</tr>
</thead>
</table>

#### Controlled Emissions

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Potential to Emit (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>8.02</td>
</tr>
</tbody>
</table>

#### 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.
<table>
<thead>
<tr>
<th>Emissions Unit Equipment No.</th>
<th>1004059 &amp; USEPA Permit PSD SE 78-02</th>
<th>BAP-DC-143</th>
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<tbody>
<tr>
<td>Equipment Description</td>
<td>Boric Acid Secondary Crusher &amp; Ore Feed System</td>
<td></td>
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<tr>
<td>Uncontrolled Emissions</td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td></td>
<td>PM$_{10}$</td>
<td>2410</td>
</tr>
<tr>
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<td>Fabric Collector and Scrubber</td>
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</tr>
<tr>
<td>Controlled Emissions</td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td></td>
<td>PM$_{10}$</td>
<td>2.44</td>
</tr>
<tr>
<td>Monitoring Procedures</td>
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<td></td>
</tr>
<tr>
<td>Monitoring Ranges</td>
<td>Visible Emissions not to exceed 10% Opacity or Ringelmann ½.</td>
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<table>
<thead>
<tr>
<th>Emissions Unit Equipment No.</th>
<th>1004060 &amp; USEPA Permit PSD SE 78-02</th>
<th>BAP-DC-129</th>
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<tr>
<td>Equipment Description</td>
<td>Boric Acid #1 Drying Operation</td>
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<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td></td>
<td>PM$_{10}$</td>
<td>19500</td>
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<tr>
<td>Control Equipment</td>
<td>Fabric Collectors</td>
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</tr>
<tr>
<td>Controlled Emissions</td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td></td>
<td>PM$_{10}$</td>
<td>19.5</td>
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<tr>
<td>Monitoring Procedures</td>
<td>Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.</td>
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<tr>
<td>Monitoring Ranges</td>
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<tr>
<td>Emissions Unit Equipment No.</td>
<td>1004061 &amp; USEPA Permit PSD SE 78-02</td>
<td>BAP-DC-130</td>
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<tr>
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<tr>
<td><strong>Equipment Description</strong></td>
<td>Boric Acid #2 Drying Operation</td>
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<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td></td>
<td>PM$_{10}$</td>
<td>19500</td>
</tr>
<tr>
<td><strong>Control Equipment</strong></td>
<td>Fabric Collectors</td>
<td></td>
</tr>
<tr>
<td><strong>Controlled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td></td>
<td>PM$_{10}$</td>
<td>19.5</td>
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<tr>
<td><strong>Monitoring Procedures</strong></td>
<td>Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.</td>
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<td><strong>Monitoring Ranges</strong></td>
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<thead>
<tr>
<th>Emissions Unit Equipment No.</th>
<th>1004063, '65 &amp; USEPA Permit PSD SE 78-02</th>
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<tbody>
<tr>
<td><strong>Equipment Description</strong></td>
<td>Boric Acid Packing, Conveying to Railcar Loadout, and Bulk Loadout Operation (Trucks &amp; Railcars)</td>
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<tr>
<td><strong>Uncontrolled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<td><strong>Equipment Description</strong></td>
<td>Boric Acid #3 Drying Operation</td>
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<td>PM$_{10}$</td>
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<td><strong>Controlled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<td><strong>Uncontrolled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<td>Fabric Collectors</td>
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<td>Pollutant</td>
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<tr>
<td>Equipment Description</td>
<td>Boric Acid Packing, Conveying to Railcar Loadout, and Bulk Loadout Operation (Trucks &amp; Railcars)</td>
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<tr>
<td>Uncontrolled Emissions</td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
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<td>Fabric Collectors</td>
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<tr>
<td>Uncontrolled Emissions</td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<td>PM$_{10}$</td>
<td>11960</td>
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<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
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<td>PM$_{10}$</td>
<td>11.96</td>
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<tr>
<td>Monitoring Ranges</td>
<td>Visible Emissions shall be less than 20% opacity or Ringelmann No. 1</td>
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Appx B-25
<table>
<thead>
<tr>
<th>Emissions Unit Equipment No.</th>
<th>1004063, 66, ’68 &amp; USEPA Permit PSD SE 78-02</th>
<th>BAS-DC-125 (DC-4)</th>
</tr>
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<tbody>
<tr>
<td>Equipment Description</td>
<td>Boric Acid Packing, Conveying to Railcar Loadout, and Bulk Loadout Operation (Trucks &amp; Railcars)</td>
<td></td>
</tr>
<tr>
<td>Uncontrolled Emissions</td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td></td>
<td>PM$_{10}$</td>
<td>6000</td>
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<tr>
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<td>Fabric Collectors</td>
<td></td>
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<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<td>PM$_{10}$</td>
<td>6.0</td>
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<td>Monitoring Procedures</td>
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<tr>
<td>Monitoring Ranges</td>
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<table>
<thead>
<tr>
<th>Emissions Unit Equipment No.</th>
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<th>BAS-DC-168 (DC-7)</th>
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<td>Uncontrolled Emissions</td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<td>PM$_{10}$</td>
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<tr>
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<td>Fabric Collectors</td>
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<td>Pollutant</td>
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<td></td>
<td>PM$_{10}$</td>
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<tr>
<td>Emissions Unit Equipment No.</td>
<td>1004068 &amp; USEPA Permit PSD SE 78-02</td>
<td>SHP-DC-701 (DC-8)</td>
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<td>Equipment Description</td>
<td>Boric Acid Packing, Conveying to Railcar Loadout, and Bulk Loadout Operation (Trucks &amp; Railcars)</td>
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<tr>
<td>Uncontrolled Emissions</td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<tr>
<td></td>
<td>PM$_{10}$</td>
<td>8450</td>
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<td>Fabric Collectors</td>
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<thead>
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<th>Emissions Unit Equipment No.</th>
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<tbody>
<tr>
<td>Equipment Description</td>
<td>Diatomaceous Earth Reclamation and Storage Operation</td>
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<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<tr>
<td></td>
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<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<tr>
<td></td>
<td>PM$_{10}$</td>
<td>37.23</td>
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<tr>
<td>Monitoring Procedures</td>
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<tr>
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<td>Visible Emissions shall be less than 20% opacity.</td>
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### Emissions Unit Equipment No. 1004085 BAS-DC-700

<table>
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<th>Equipment Description</th>
<th>Uncontrolled Emissions</th>
<th>Pollutant</th>
<th>Potential to Emit (tons/year)</th>
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<tbody>
<tr>
<td>Bulk Container Pneumatic Loading Operation</td>
<td>PM$_{10}$</td>
<td>2100</td>
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<table>
<thead>
<tr>
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<th>Controlled Emissions</th>
<th>Pollutant</th>
<th>Potential to Emit (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabric Collectors</td>
<td>PM$_{10}$</td>
<td>2.10</td>
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<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.</td>
<td>There shall be no visible emissions.</td>
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### Emissions Unit Equipment No. 1004182 STK-DC-011 (DC-5)

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<th>Equipment Description</th>
<th>Uncontrolled Emissions</th>
<th>Pollutant</th>
<th>Potential to Emit (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk Store Facility Reclamation System (Domes #1 West and Dome #2 East)</td>
<td>PM$_{10}$</td>
<td>301</td>
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<table>
<thead>
<tr>
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<th>Controlled Emissions</th>
<th>Pollutant</th>
<th>Potential to Emit (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabric Collectors</td>
<td>PM$_{10}$</td>
<td>0.301</td>
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<thead>
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<th>Monitoring Ranges</th>
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<td>Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.</td>
<td>Visible Emissions shall be less than 7% opacity.</td>
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<tr>
<td>Emissions Unit Equipment No.</td>
<td>1004183</td>
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<tr>
<td>-----------------------------</td>
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</tr>
<tr>
<td>Equipment Description</td>
<td>Bulk Store Facility Reclamation System (Domes #1 West and Dome #2 East)</td>
</tr>
<tr>
<td>Uncontrolled Emissions</td>
<td>Pollutant</td>
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<tr>
<td></td>
<td>PM$_{10}$</td>
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<tr>
<td>Control Equipment</td>
<td>Fabric Collectors</td>
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<tr>
<td>Controlled Emissions</td>
<td>Pollutant</td>
</tr>
<tr>
<td></td>
<td>PM$_{10}$</td>
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<tr>
<td>Monitoring Procedures</td>
<td>Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.</td>
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<td>Monitoring Ranges</td>
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<th>Emissions Unit Equipment No.</th>
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<th>STK-DC-001 (DC-2)</th>
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<td>Bulk Store Facility Reclamation System (Domes #1 West and Dome #2 East)</td>
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<td>Uncontrolled Emissions</td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<tr>
<td></td>
<td>PM$_{10}$</td>
<td>2350</td>
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<td>Fabric Collectors</td>
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<td>Controlled Emissions</td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<tr>
<td></td>
<td>PM$_{10}$</td>
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<td>Monitoring Ranges</td>
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<td>Emissions Unit Equipment No.</td>
<td>1004182 and 1004183</td>
<td>STK-DC-009</td>
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<td><strong>Uncontrolled Emissions</strong></td>
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<tr>
<td>PM$_{10}$</td>
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<th>Emissions Unit Equipment No.</th>
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<tbody>
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<tr>
<td><strong>Uncontrolled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<tr>
<td>PM$_{10}$</td>
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<td><strong>Control Equipment</strong></td>
<td>Fabric Collectors</td>
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<tr>
<td><strong>Controlled Emissions</strong></td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<tr>
<td>PM$_{10}$</td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td><strong>Monitoring Procedures</strong></td>
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<tr>
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<td>Visible Emissions shall be less than 7% opacity.</td>
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<td>Emissions Unit</td>
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<td>Description</td>
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<td>1004206</td>
<td>Borax Pond Reprocessing Facility</td>
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<td>MSP-DC-004</td>
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<td>1004222</td>
<td>Boric Acid #4 Drying Operation</td>
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<td>BAP-DC-136</td>
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<td>BAP-SB-137</td>
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<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
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<td>PM$_{10}$</td>
<td>750</td>
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<td>Potential to Emit (tons/year)</td>
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</tr>
<tr>
<td>Monitoring Ranges</td>
<td>Visible Emissions not to exceed 5% Opacity or Ringelmann ¼</td>
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<th>1004223</th>
<th>GRB-DC-001</th>
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<tbody>
<tr>
<td>Equipment Description</td>
<td>Granubor II Silo #1 and Bucket Elevator</td>
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</tr>
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<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td></td>
<td>PM$_{10}$</td>
<td>2250</td>
</tr>
<tr>
<td>Control Equipment</td>
<td>Fabric Collectors</td>
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<tr>
<td>Controlled Emissions</td>
<td>Pollutant</td>
<td>Potential to Emit (tons/year)</td>
</tr>
<tr>
<td></td>
<td>PM$_{10}$</td>
<td>2.25</td>
</tr>
<tr>
<td>Monitoring Procedures</td>
<td>Daily magnahelic check, Semi-Annual EPA Method 9 or 22, daily tonnage records and maintenance every 30-60 days.</td>
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</tr>
<tr>
<td>Monitoring Ranges</td>
<td>Visible Emissions not to exceed 5% Opacity or Ringelmann ¼</td>
<td></td>
</tr>
</tbody>
</table>
Appendix A

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 2009

<table>
<thead>
<tr>
<th>Pollutants:</th>
<th>CO₂</th>
<th>CH₄</th>
<th>N₂O</th>
<th>HFCs</th>
<th>PFCs</th>
<th>SF₆</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Emissions (tpy):</td>
<td>310,230.21</td>
<td>5.26</td>
<td>0.49</td>
<td>N/A</td>
<td>N/A</td>
<td>0.034</td>
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<td>*GWP:</td>
<td>1</td>
<td>21</td>
<td>310</td>
<td>**</td>
<td>**</td>
<td>23,900</td>
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<tr>
<td>CO₂e (tpy):</td>
<td>310,230.2</td>
<td>110.4</td>
<td>150.4</td>
<td>N/A</td>
<td>N/A</td>
<td>811.4</td>
<td>311,302.4</td>
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</table>

GHGs in table above were reported as CO₂e for facility-wide Actual Emissions for year 2009.

*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.