PART 70
PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

Operating Permit Number: OP2010-059A
Expiration Date: June 16, 2015
Installation ID: 195-0010
Project Number: 2011-02-035

Installation Name and Address
Marshall Municipal Utilities Power Plant
765 West North Street
Marshall, MO 65340
Saline County

Parent Company's Name and Address
Marshall Municipal Utilities
75 East Morgan
Marshall, MO 65340

Installation Description:
Marshall Municipal Utilities is a power plant with one natural gas boiler generating unit, two coal fired boiler generator units, two reciprocating dual fueled internal combustion generating units, a gas turbine generating unit and a heating boiler. Two internal combustion peaking generators are located at the water treatment plant and one is located at the wastewater treatment plant.

The city makes its own paper pellets using recycled paper. The pellets are burned with coal in one of the coal fired boiler generating units and in the boiler that heats the power plant.

The installation is a major source of Carbon Monoxide (CO), Greenhouse Gases (CO2e), Nitrogen Oxides (NOx), Particulate Matter ≤ Ten Microns (PM10), Particulate Matter ≤ 2.5 Microns (PM2.5), Sulfur Oxides (SOx), Volatile Organic Compounds (VOCs), Hazardous Air Pollutants (HAPs), Hydrogen Chloride (7647-01-0), and Hydrogen Fluoride (7664-39-3).

This is an amended operating permit to incorporate natural gas as a new fuel source for EP-18 as requested by the permittee and the newly applicable requirements of 40 CFR Part 63, Subpart ZZZZ; therefore, the expiration date has not changed.

FEB 07 2012
Effective Date

[Signature]
Director or Designee
Department of Natural Resources
Table of Contents

I. INSTALLATION DESCRIPTION AND EQUIPMENT LISTING ..............................................................5

II. PLANT WIDE EMISSION LIMITATIONS............................................................................................7

III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS .................................................................8

   PERMIT CONDITIONs EP-04 - 001 and EP-05 - 001 .................................................................8
       10 CSR 10-6.405 Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used For Indirect Heating
       40 CFR Part 64, Compliance Assurance Monitoring (CAM)
       10 CSR 10-6.220 Restriction of Emissions of Visible Air Contaminants
       10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds
   PERMIT CONDITION EP-04 - 004 .................................................................15
       10 CSR 10-6.060 Construction Permits Required
       Construction Permit 0695-024, Issued June 20, 1995

   EP-06 COMBUSTION TURBINE UNIT 6
   PERMIT CONDITION EP-06 - 001 .................................................................................................16
       10 CSR 10-6.060 Construction Permits Required
       Construction Permit 042001-012, Issued April 5, 2001
   PERMIT CONDITION EP-06 - 002 .................................................................................................17
       10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds

       10 CSR 10-6.060 Construction Permits Required
       Construction Permit 022009-012, Issued February 27, 2009
       10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds
       10 CSR 10-6.075 Maximum Achievable Control Technology Regulations

   EP-10 GENERATOR
   PERMIT CONDITION EP-10 - 001 .................................................................................................32
       10 CSR 10-6.060 Construction Permits Required
       Construction Permit 1191-010A, Issued April 29, 1992
   PERMIT CONDITION EP-10 - 002 .................................................................................................33
       10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds
   PERMIT CONDITION EP-10 – 003 .................................................................................................34
       10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
EP-11 GENERATOR
PERMIT CONDITION EP-11 - 001 ........................................................................................................... 47
  10 CSR 10-6.060 Construction Permits Required
  Construction Permit 0493-002, Issued April 6, 1993
PERMIT CONDITION EP-11 - 002 ........................................................................................................... 48
  10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds
PERMIT CONDITION EP-11 - 003 ........................................................................................................... 49
  10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
  Stationary Reciprocating Internal Combustion Engines

EP-18 BOILER
PERMIT CONDITION EP-18 - 001 ........................................................................................................... 61
  10 CSR 10-6.060 Construction Permits Required
  Construction Permit 092002-007, Issued August 5, 2002
PERMIT CONDITION EP-18 - 002 ........................................................................................................... 61
  10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants
PERMIT CONDITION EP-18 - 003 ........................................................................................................... 63
  10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds
PERMIT CONDITION EP-18 - 004 ........................................................................................................... 64
  10 CSR 10-6.405 Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used For
  Indirect Heating

IV. CORE PERMIT REQUIREMENTS ....................................................................................................65

V. GENERAL PERMIT REQUIREMENTS ..............................................................................................72

VI. ATTACHMENTS ..............................................................................................................................78

ATTACHMENT A ......................................................................................................................................... 79
  Inspection/Maintenance/Repair/Malfunction Log

ATTACHMENT B ......................................................................................................................................... 80
  10 CSR 10-6.405 Compliance Demonstration

ATTACHMENT C ......................................................................................................................................... 83
  Method 22 Opacity Observations

ATTACHMENT D ......................................................................................................................................... 84
  Method 9 Opacity Observations

ATTACHMENT E ......................................................................................................................................... 85
  Construction Permit 0695-024
  EP-04 Coal/Paper Pellets Tracking Sheet

ATTACHMENT F ......................................................................................................................................... 86
  Construction Permit 042001-012
  EP-06 Fogging SOx Emissions Tracking Sheet

ATTACHMENT G ......................................................................................................................................... 87
  Construction Permit 022009-012

ATTACHMENT H ......................................................................................................................................... 88
  Construction Permit 092002-007
  EP-18 Fuel Oil #2 Tracking Sheet
ATTACHMENT I .......................................................................................................................................... 89
   Fugitive Emission Observations

ATTACHMENT J .......................................................................................................................................... 90
   10 CSR 10-6.260 Compliance Demonstration
I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

A power plant with one natural gas boiler generating unit, two coal fired boiler generator units, two reciprocating dual fueled internal combustion generating units, a gas turbine generating unit and a heating boiler. Two internal combustion peaking generators are located at the water treatment plant and one is located at the wastewater treatment plant.

The city makes its own paper pellets using recycled paper. The pellets are burned with coal in one of the coal fired boiler generating units and in the boiler that heats the power plant.

The installation is a major source of Carbon Monoxide (CO), Greenhouse Gases (CO2e), Nitrogen Oxides (NOx), Particulate Matter ≤ Ten Microns (PM10), Particulate Matter ≤ 2.5 Microns (PM2.5), Sulfur Oxides (SOx), Volatile Organic Compounds (VOCs), Hazardous Air Pollutants (HAPs), Hydrogen Chloride (7647-01-0), and Hydrogen Fluoride (7664-39-3).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>11.03</td>
<td>10.35</td>
<td>45.49</td>
<td>53.93</td>
<td>56.80</td>
</tr>
<tr>
<td>Ammonia (NH₃)</td>
<td>0.05</td>
<td>0.06</td>
<td>0.20</td>
<td>0.22</td>
<td>14.37</td>
</tr>
<tr>
<td>Nitrogen Oxides (NOx)</td>
<td>184.59</td>
<td>295.43</td>
<td>617.32</td>
<td>684.44</td>
<td>506.82</td>
</tr>
<tr>
<td>Condensable Particulate Matter (PM CON)</td>
<td>43.99</td>
<td>73.51</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Filterable Particulate Matter ≤ Ten Microns (PM_{10})</td>
<td>3.43</td>
<td>4.45</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Filterable Particulate Matter ≤ 2.5 Microns (PM_{2.5})</td>
<td>1.33</td>
<td>1.12</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Particulate Matter ≤ Ten Microns (PM_{10})</td>
<td>-</td>
<td>-</td>
<td>155.12</td>
<td>135.47</td>
<td>151.42</td>
</tr>
<tr>
<td>Total Particulate Matter ≤ 2.5 Microns (PM_{2.5})</td>
<td>-</td>
<td>-</td>
<td>149.09</td>
<td>44.61</td>
<td>52.39</td>
</tr>
<tr>
<td>Sulfur Oxides (SOx)</td>
<td>905.92</td>
<td>1,400.38</td>
<td>3,146.86</td>
<td>3,988.99</td>
<td>3,333.26</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOC)</td>
<td>1.14</td>
<td>1.45</td>
<td>4.17</td>
<td>5.01</td>
<td>3.76</td>
</tr>
<tr>
<td>Hazardous Air Pollutants (HAPs)</td>
<td>11.33</td>
<td>22.87</td>
<td>38.61</td>
<td>40.37</td>
<td>4.00</td>
</tr>
<tr>
<td>Hydrogen Chloride (7647-01-0)</td>
<td>9.95</td>
<td>20.17</td>
<td>34.05</td>
<td>35.60</td>
<td>0.02</td>
</tr>
<tr>
<td>Hydrogen Fluoride (7664-39-3)</td>
<td>1.24</td>
<td>2.52</td>
<td>4.26</td>
<td>4.45</td>
<td>3.73</td>
</tr>
<tr>
<td>Lead Compounds (20-11-1)</td>
<td>0.04</td>
<td>0.02</td>
<td>0.01</td>
<td>0.02</td>
<td>0.04</td>
</tr>
<tr>
<td>Cyanide Compounds (20-09-7)</td>
<td>0.02</td>
<td>0.03</td>
<td>0.06</td>
<td>0.06</td>
<td>0.05</td>
</tr>
<tr>
<td>Selenium Compounds (20-16-6)</td>
<td>0.01</td>
<td>0.02</td>
<td>0.03</td>
<td>0.03</td>
<td>0.02</td>
</tr>
<tr>
<td>Benzene (71-43-2)</td>
<td>0.01</td>
<td>0.02</td>
<td>0.03</td>
<td>0.03</td>
<td>0.02</td>
</tr>
<tr>
<td>Benzyl Chloride (100-44-7)</td>
<td>0.01</td>
<td>0.01</td>
<td>0.02</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>Isophorone (78-59-1)</td>
<td>0.004</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Acetaldehyde (75-07-0)</td>
<td>0.004</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Methyl Chloride (74-87-3)</td>
<td>0.004</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Manganese Compounds (20-12-2)</td>
<td>0.004</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Arsenic Compounds (20-01-9)</td>
<td>0.003</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Propionaldehyde (123-38-6)</td>
<td>0.003</td>
<td>0.005</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Acrolein (107-02-8)</td>
<td>0.002</td>
<td>0.004</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Dichloromethane (75-09-2)</td>
<td>0.002</td>
<td>0.004</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Nickel Compounds (20-14-4)</td>
<td>0.002</td>
<td>0.004</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
</tbody>
</table>
EMISSION UNITS WITH LIMITATIONS
The following list provides a description of the equipment at this installation which emits air pollutants and which is identified as having unit-specific emission limitations.

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Fuel</th>
<th>MHDR (MMBtu/hr)</th>
<th>Design Rated Output (MWe)</th>
<th>Construction Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-04 Boiler Unit 4</td>
<td>Bituminous Coal, RDF&lt;sup&gt;1&lt;/sup&gt;, Natural Gas</td>
<td>108</td>
<td>6.0</td>
<td>1957</td>
</tr>
<tr>
<td>EP-05 Boiler Unit 5</td>
<td>Bituminous Coal, Natural Gas</td>
<td>235</td>
<td>16.5</td>
<td>1967</td>
</tr>
<tr>
<td>EP-06 Combustion Turbine Unit 6</td>
<td>Fuel Oil #2, Natural Gas</td>
<td>274</td>
<td>15.2</td>
<td>1973</td>
</tr>
<tr>
<td>EP-07 Peaking Unit 7</td>
<td>Fuel Oil #2, Natural Gas</td>
<td>12 each</td>
<td>1 each</td>
<td>1989</td>
</tr>
<tr>
<td>EP-08 Peaking Unit 8</td>
<td>Fuel Oil #2</td>
<td>1 each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-09 Peaking Unit 9</td>
<td>Fuel Oil #2</td>
<td>1 each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-10 Generator Unit 10</td>
<td>Fuel Oil #2, Natural Gas</td>
<td>54 each</td>
<td>6.3 each</td>
<td>1989</td>
</tr>
<tr>
<td>EP-11 Generator Unit 11</td>
<td>Fuel Oil #2, Natural Gas</td>
<td>6.3 each</td>
<td></td>
<td>1993</td>
</tr>
<tr>
<td>EP-18 Boiler</td>
<td>RDF&lt;sup&gt;1&lt;/sup&gt;, Fuel Oil #2, Natural Gas</td>
<td>5.25</td>
<td>-</td>
<td>2003</td>
</tr>
</tbody>
</table>

<sup>1</sup>RDF (refuse derived fuel) = Paper Pellet fuel

EMISSION UNITS WITHOUT LIMITATIONS
The following list provides a description of the equipment which does not have unit specific limitations at the time of permit issuance.

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-03</td>
<td>74 MMBtu/hr Natural Gas Fired Boiler Unit 3, 1948, 4.0 MWe</td>
</tr>
<tr>
<td>EP-12</td>
<td>Clean Coal Storage</td>
</tr>
<tr>
<td>EP-13</td>
<td>Vent from North Storage Tank (200,000 gallons #2 Oil)</td>
</tr>
<tr>
<td>EP-14</td>
<td>Vent from South Storage Tank (200,000 gallons #2 Oil)</td>
</tr>
<tr>
<td>EP-15</td>
<td>Vent from Water Plant Storage Tank, Malta Bend (4,000 gallons #2 Oil)</td>
</tr>
<tr>
<td>EP-16</td>
<td>Vent from Wastewater Plant Storage Tank, Watermill Road (2,000 gallons #2 Oil)</td>
</tr>
<tr>
<td>EP-17</td>
<td>WTP Space Heater 0.628 MMBtu/hr</td>
</tr>
<tr>
<td>-</td>
<td>Cooling Tower Chemicals</td>
</tr>
<tr>
<td>-</td>
<td>Used oil storage tank (1,000 gallons)</td>
</tr>
<tr>
<td>-</td>
<td>Two diesel oil storage day tanks (750 gallons each)</td>
</tr>
<tr>
<td>-</td>
<td>Phosphoric Acid-liquid storage (2000 gallons)</td>
</tr>
<tr>
<td>-</td>
<td>Parts washer (30 gallons)</td>
</tr>
</tbody>
</table>
II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect on the date of permit issuance.

None.
III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

<table>
<thead>
<tr>
<th>EP-04 and EP-05 Boiler Units 4 and 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>1957, Bituminous Coal/Refuse-Derived Fuel/ Natural Gas Fired, 108 MMBtu/hr, 6.0 MWe</td>
</tr>
<tr>
<td>1967, Bituminous Coal/Natural Gas Fired, 235 MMBtu/hr, 16.5 MWe</td>
</tr>
</tbody>
</table>

**PERMIT CONDITIONS EP-04 - 001 and EP-05 - 001**
10 CSR 10-6.405 Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used For Indirect Heating
40 CFR Part 64, Compliance Assurance Monitoring (CAM)

**Emission Limitations:**
The permittee shall not emit particulate matter in excess of 0.31 lb/MMBtu of heat input from each individual boiler.

**Natural Gas Requirements**
The following requirements apply when EP-04 and EP-05 are exclusively combusting natural gas:

**Operational Limitation:**
The permittee shall calibrate, maintain and operate the emission units according to the manufacturer’s specifications and recommendations.

**Monitoring/Recordkeeping:**
1. Maintain a maintenance log noting all inspections, malfunctions, and repairs of the natural gas burners using Attachment A or an equivalent form generated by the permittee.
2. Attachment B contains calculations which demonstrate that the emission units will never exceed the emission limitation while combusting natural gas.
3. Records may be kept in either written or electronic form.
4. These records shall be made available immediately for inspection to the Department of Natural Resources’ personnel upon request.
5. All records shall be maintained for five years.

**Reporting:**
The permittee shall report any deviations from the emission limitation, operational limitation, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.
**Bituminous Coal/Refuse-Derived Fuel Requirements**

The following requirements apply when EP-04 is combusting bituminous coal, refused derived fuel, or either of these fuels in combination with natural gas. The following requirements apply when EP-05 is combusting exclusively bituminous coal or bituminous coal in combination with natural gas:

**Operational Limitations:**
1. The permittee shall control particulate emissions from EP-04 Boiler Unit 4 and EP-05 Boiler Unit 5 using baghouses. The baghouses shall be equipped with a gauge or meter, which indicates the pressure drop across the baghouse. These gauges or meters shall be located such that Department of Natural Resources’ employees may easily observe them. Replacement bags shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
2. The permittee shall maintain and operate the baghouses according to the manufacturer’s specifications and recommendations.

**Monitoring:**
1. The performance requirements for the baghouses shall be as specified in the following table:

<table>
<thead>
<tr>
<th>Particulate Matter (PM) Compliance Indicator</th>
<th>Indicator #1</th>
<th>Indicator #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement Approach</td>
<td>Visible Emissions from the baghouse exhaust shall be monitored daily using EPA Method 22 – like procedures.</td>
<td>Pressure drop across the baghouse shall be measured with a differential pressure gauge.</td>
</tr>
<tr>
<td>Indicator Range</td>
<td>An excursion is defined as the presence of visible emissions. Excursions trigger an inspection, corrective action, and a reporting requirement.</td>
<td>An excursion is defined as a pressure drop less than 2 in H2O. Excursions trigger an inspection, corrective action, and a reporting requirement.</td>
</tr>
<tr>
<td>Quality Improvement Plan (QIP) Threshold</td>
<td>The QIP threshold for baghouse visible emissions is 3 releases in a 6-month reporting period.</td>
<td>None selected.</td>
</tr>
</tbody>
</table>

**Performance Criteria**

<table>
<thead>
<tr>
<th>Data Representativeness</th>
<th>Measurements shall be conducted at the stack exhaust.</th>
<th>Pressure taps are located at the baghouse inlet and outlet. The gauge has a minimum accuracy of 0.25 in H2O.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verification of Operational Status</td>
<td>Not Applicable.</td>
<td>The pressure gauge shall be calibrated every 3 months. Pressure taps shall be checked for plugging daily.</td>
</tr>
<tr>
<td>QA/QC Practices and Criteria</td>
<td>The visible emissions observer shall be familiar with Method 22 and follow Method 22 – like procedures.</td>
<td>The pressure drop shall be monitored continuously.</td>
</tr>
<tr>
<td>Monitoring Frequency</td>
<td>A 6-minute Method 22 – like observation shall be performed daily while the unit is in operation.</td>
<td>The pressure drop shall be manually recorded daily.</td>
</tr>
<tr>
<td>Data Collection Procedure</td>
<td>The visible emissions observation shall be documented by the observer.</td>
<td>None.</td>
</tr>
<tr>
<td>Averaging Period</td>
<td>Not Applicable.</td>
<td>None.</td>
</tr>
</tbody>
</table>
2. Proper maintenance. At all times, the permittee shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. [§64.7(b)]

3. Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions units are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. 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. [§64.7(c)]

4. Response to excursions: [§64.7(d)]
   a) Upon detecting an excursion, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable. [§64.7(d)(1)]
   b) Determination of whether the permittee has used acceptable procedures in response to an excursion will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. [§64.7(d)(2)]

5. Documentation of need for improved monitoring. After approval of monitoring under this part, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Part 70 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. [§64.7(e)]

**Quality improvement plan (QIP):**

1. The permittee shall develop and implement a QIP if either boiler has accumulated three excursions within a single six month reporting period.

2. Elements of a QIP: [§64.8(b)]
   a) The permittee shall maintain a written QIP, if required, and have it available for inspection. [§64.8(b)(1)]
b) The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate: [§64.8(b)(2)]
   i) Improved preventive maintenance practices. [§64.8(b)(2)(i)]
   ii) Process operation changes. [§64.8(b)(2)(ii)]
   iii) Appropriate improvements to control methods. [§64.8(b)(2)(iii)]
   iv) Other steps appropriate to correct control performance. [§64.8(b)(2)(iv)]
   v) More frequent or improved monitoring (only in conjunction with one or more steps under §64.8(b)(2)(i) through (iv)). [§64.8(b)(2)(v)]

3. If a QIP is required, the permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined. [§64.8(c)]

4. Following implementation of a QIP, upon any subsequent determination pursuant to §64.7(d)(2) the Administrator or the permitting authority may require that the permittee make reasonable changes to the QIP if the QIP is found to have: [§64.8(d)]
   a) Failed to address the cause of the control device performance problems; or [§64.8(d)(1)]
   b) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. [§64.8(d)(2)]

5. Implementation of a QIP shall not excuse the permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. [§64.8(e)]

Recordkeeping:
1. The permittee shall maintain records of all Method 22 observation results using Attachment C, or an equivalent form generated by the permittee, noting whether any air emissions (except for water vapor) were visible from the emission sources.
2. The permittee shall comply with the recordkeeping requirements specified in §70.6(a)(3)(ii). The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). [§64.9(b)(1)]
3. Instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [§64.9(b)(2)]
4. All records shall be kept for five years and be made available to any Missouri Department of Natural Resources’ personnel upon request.

Reporting:
1. The permittee shall submit monitoring reports to the permitting authority in accordance with §70.6(a)(3)(iii). [§64.9(a)(1)]
2. A report for monitoring under this part shall include, at a minimum, the information required under §70.6(a)(3)(iii) and the following information, as applicable: [§64.9(a)(2)]
a) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions, as applicable, and the corrective actions taken; [§64.9(a)(2)(i)]

b) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and [§64.9(a)(2)(ii)]

c) A description of the actions taken to implement a QIP, if a QIP is required, during the reporting period as specified in §64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions occurring. [§64.9(a)(2)(iii)]

3. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction, which could possibly cause an exceedance of this regulation.

4. The permittee shall report any deviations from the emission limitations, monitoring, quality improvement plan, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

10 CSR 10-6.220 Restriction of Emissions of Visible Air Contaminants

Emission Limitation:
1. The permittee shall not cause or allow emissions to be discharged into the atmosphere from any existing source any visible emissions with opacity greater than 40 percent.

2. Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six minutes in any 60 minutes air contaminants with opacity up to 60 percent.

Natural Gas Requirements
The following requirements apply when EP-04 and EP-05 are exclusively combusting natural gas:

Monitoring:
1. The permittee shall conduct daily opacity readings on these emission sources using the procedures contained in USEPA Test Method 22. Readings are only required when the emission sources are operating and when the weather conditions allow. If no visible emissions are observed using these procedures, then no further observations are required. If visible emissions are observed, then the source representative shall conduct a Method 9 observation.

2. The following monitoring schedule shall be maintained:
   a) Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then
   b) Observations shall be conducted once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then
   c) Observations shall be conducted once per month. If a violation is noted, monitoring reverts to weekly.
   d) If, at the issuance of this permit, the permittee has progressed in the monitoring schedule listed above, the permittee may continue to advance accordingly.

3. If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.
**Recordkeeping:**
1. The permittee shall maintain records of all Method 22 observation results using Attachment C, or an equivalent form generated by the permittee, noting whether any air emissions (except for water vapor) were visible from the emission sources.
2. The permittee shall maintain records of all Method 9 observation results using Attachment D, or an equivalent form generated by the permittee, noting whether the visible emissions (except for water vapor) exceeded the opacity limit.
3. The permittee shall maintain records of any equipment malfunctions using Attachment A or an equivalent form generated by the permittee.
4. Records may be kept in either written or electronic form.
5. These records shall be made available immediately for inspection to Department of Natural Resources’ personnel upon request.
6. All records shall be maintained for five years.

**Reporting:**
1. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
2. The permittee shall report any deviations from the emission limitations, monitoring, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

**Bituminous Coal/Refuse-Derived Fuel Requirements**
The following requirements apply when EP-04 is combusting bituminous coal, refused derived fuel, or either of these fuels in combination with natural gas. The following requirements apply when EP-05 is combusting exclusively bituminous coal or bituminous coal in combination with natural gas:

**Monitoring:**
The permittee shall conduct daily opacity readings on these emission sources using the procedures contained in USEPA Test Method 22. Readings are only required when the emission sources are operating and when the weather conditions allow. If no visible emissions are observed using these procedures, then no further observations are required. If visible emissions are observed, then the source representative shall conduct a Method 9 observation.

**Recordkeeping:**
1. The permittee shall maintain records of all Method 22 observation results using Attachment C, or an equivalent form generated by the permittee, noting whether any air emissions (except for water vapor) were visible from the emission sources.
2. The permittee shall maintain records of all Method 9 observation results using Attachment D, or an equivalent form generated by the permittee, noting whether the visible emissions (except for water vapor) exceeded the opacity limit.
3. The permittee shall maintain records of any equipment malfunctions using Attachment A or an equivalent form generated by the permittee.
4. Records may be kept in either written or electronic form.
5. These records shall be made available immediately for inspection to Department of Natural Resources’ personnel upon request.
6. All records shall be maintained for five years.

**Reporting:**
1. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
2. The permittee shall report any deviations from the emission limitations, monitoring, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

---


10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds

The permittee is exempt from the requirements of this permit condition while combusting exclusively pipeline grade natural gas per 10 CSR 10-6.260(1)(A).

**Emission Limitations:**
1. The permittee shall not cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight pounds of sulfur dioxide per million BTUs actual heat input averaged on any consecutive three hour time period.
2. The permittee shall not cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Concentration by Volume</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfur Dioxide (SO₂)</td>
<td>0.5 ppm (1300 µg/m³)</td>
<td>3-hour average not to be exceeded more than once per year</td>
</tr>
<tr>
<td></td>
<td>75 ppb</td>
<td>1-hour average; 3-year average of the 99th percentile of the daily maximum 1-hour average at each site monitor within an area</td>
</tr>
<tr>
<td>Hydrogen Sulfide (H₂S)</td>
<td>0.05 ppm (70 µg/m³)</td>
<td>½-hour average not to be exceeded over 2 times per year</td>
</tr>
<tr>
<td></td>
<td>0.03 ppm (42 µg/m³)</td>
<td>½-hour average not to be exceeded over 2 times in any 5 consecutive days</td>
</tr>
<tr>
<td>Sulfuric Acid (H₂SO₄)</td>
<td>10 µg/m³</td>
<td>24-hour average not to be exceeded more than once in any 90 consecutive days</td>
</tr>
<tr>
<td></td>
<td>30 µg/m³</td>
<td>1-hour average not to be exceeded more than once in any 2 consecutive days</td>
</tr>
</tbody>
</table>

1This requirement is not federally enforceable. This requirement can only be directly enforced by the State of Missouri.

**Monitoring:**
1. The permittee shall monitor the sulfur content and heating value of the coal combusted at least once each week. The permittee may perform their own coal analysis or use data obtained from their coal supplier.
2. The permittee shall calculate the sulfur emission rate in lb/MMBtu at least once each week using Attachment J.
**Recordkeeping:**
1. The permittee shall retain Attachment J which contains calculations demonstrating the permittee is in compliance with this regulation.
2. Records may be kept in either written or electronic form.
3. These records shall be made available immediately for inspection to Department of Natural Resources’ personnel upon request.
4. All records shall be maintained for five years.

**Reporting:**
1. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
2. The permittee shall report any deviations from the emission limitations, monitoring, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

---

**PERMIT CONDITION EP-04 - 004**

10 CSR 10-6.060 Construction Permits Required
Construction Permit 0695-024, Issued June 20, 1995

---

**Operational Limitations:**
1. Special Condition 1: The permittee shall not fire a coal/pelletized paper mixture which exceeds 30 weight percent pelletized paper in EP-04 Boiler Unit 4. The maximum amount of pelletized paper that may be combusted in EP-04 Boiler Unit 4 is 6,000 tons in any consecutive 12-month period.
2. Special Condition 2: The maximum amount of solid fuel that may be used in EP-04 Boiler Unit 4 is 20,000 tons in any consecutive 12-month period. Solid fuel includes coal, pelletized paper, or a mixture thereof.

**Monitoring/Recordkeeping:**
1. Special Condition 3: The permittee shall keep records which track the amount of coal, pelletized paper, and total solid fuel fired each month in EP-04 Boiler Unit 4, using Attachment E or an equivalent form generated by the permittee. The records shall also indicate the mixture ratio (as-fired) of coal and pelletized paper, expressed as a split (e.g. 70/30 coal/pelletized paper would indicate that of the total amount of fuel fired to the boiler, 70 percent by weight was coal and 30 percent by weight was pelletized paper). The records shall also indicate the total amount of pelletized paper and the total amount of solid fuel combusted in EP-04 Boiler Unit 4 for the previous 12-month period. The previous five years of records shall be kept on-site and be made immediately available to Department of Natural Resources' personnel upon verbal request.
2. Records may be kept in either written or electronic form.

**Reporting:**
1. Special Condition 4: The permittee shall notify the Air Pollution Control Program’s Enforcement Section P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which records indicate an exceedance.
2. The permittee shall report any deviations from the operational limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

### EP-06 Combustion Turbine Unit 6

<table>
<thead>
<tr>
<th>Description</th>
<th>Manufacturer/Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973 Fuel Oil #2/Natural Gas Fired, 274 MMBtu/hr, 15.2 MWe</td>
<td>Westinghouse 191G</td>
</tr>
</tbody>
</table>

### PERMIT CONDITION EP-06 - 001

10 CSR 10-6.060 Construction Permits Required  
Construction Permit 042001-012, Issued April 5, 2001

**Emission Limitation:**

Special Condition 2.A: The permittee shall not increase emissions of SO₂ more than 40 tons during any consecutive 12-month period as a result of operating the fogger at this installation. SO₂ emission increases from use of fogging will be determined as follows:

1. When the fuel rate is allowed to increase with fogging equipment in use:
   \[ \text{SO}_2 \text{ increase} = (\text{Fuel used with fogging}) \times (\text{percent fuel rate increase}) \times (\text{SO}_2 \text{ emission factor}) \]

2. When the fuel rate is fixed and the output of the generator increases with fogging:
   \[ \text{SO}_2 \text{ increase} = (\text{Fuel used with fogging}) \times (\text{percent MW output increase}) \times (\text{SO}_2 \text{ emission factor}) \]

**Monitoring/Recordkeeping:**

1. Special Condition 2.B: The permittee shall maintain an accurate record of the monthly emissions increase of SO₂ emitted into the atmosphere from operating the fogger equipment. Marshall Municipal Utilities, shall use Attachment F, Monthly fogger SO₂ Emissions Tracking Record, or equivalent forms for this purpose. The permittee shall maintain all records required by this permit on-site for not less than five years for the monthly SO₂ emissions and shall immediately make such records available to any Missouri Department of Natural Resources’ personnel upon request.

2. Records may be kept in either written or electronic form.

**Reporting:**

1. Special Condition 2.C: The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which records indicate an exceedance of the limit.

2. The permittee shall report any deviations from the emission limitation, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.
PERMIT CONDITION EP-06 - 002

10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds

*The permittee is exempt from the requirements of this permit condition while combusting exclusively pipeline grade natural gas per 10 CSR 10-6.260(1)(A).*

**Emission Limitations:**

1. The permittee shall not cause or permit the emission into the atmosphere of gases containing more than 500 ppmv of sulfur dioxide or more than 35 mg/m³ of sulfuric acid or sulfur trioxide or any combination of these gases averaged on any consecutive three-hour time period.
2. The permittee shall not cause or permit the emission of sulfur compounds from any source, which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Concentration by Volume</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfur Dioxide (SO₂)</td>
<td>0.5 ppm (1300 µg/m³)</td>
<td>3-hour average not to be exceeded more than once per year</td>
</tr>
<tr>
<td></td>
<td>75 ppb</td>
<td>1-hour average; 3-year average of the 99th percentile of the daily maximum 1-hour average at each site monitor within an area</td>
</tr>
<tr>
<td>Hydrogen Sulfide (H₂S)</td>
<td>0.05 ppm (70 µg/m³)</td>
<td>½-hour average not to be exceeded over 2 times per year</td>
</tr>
<tr>
<td></td>
<td>0.03 ppm (42 µg/m³)</td>
<td>½-hour average not to be exceeded over 2 times in any 5 consecutive days</td>
</tr>
<tr>
<td>Sulfuric Acid (H₂SO₄)</td>
<td>10 µg/m³</td>
<td>24-hour average not to be exceeded more than once in any 90 consecutive days</td>
</tr>
<tr>
<td></td>
<td>30 µg/m³</td>
<td>1-hour average not to be exceeded more than once in any 2 consecutive days</td>
</tr>
</tbody>
</table>

**Monitoring/Recordkeeping:**

1. The permittee shall monitor the sulfur content of each delivery of fuel documenting that the sulfur content never exceeds 0.25932 percent.
2. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
3. Records may be kept in either written or electronic form.
4. All records shall be maintained for five years.

**Reporting:**

1. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
2. The permittee shall report any deviations from the emission limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.
EP-07, EP-08, and EP-09 Peaking Units 7, 8, and 9

<table>
<thead>
<tr>
<th>Description</th>
<th>Manufacturer/Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3) 1989 Fuel Oil #2 Fired, 12 MMBtu/hr each, 1 MWe each</td>
<td>Onan Model 1000 DMLA</td>
</tr>
</tbody>
</table>

10 CSR 10-6.060 Construction Permits Required
Construction Permit 022009-012, Issued February 27, 2009

Emission Limitation:

Monitoring/Recordkeeping:
1. Special Condition 1.B: The permittee shall maintain an accurate record of NOₓ emitted into the atmosphere from the three diesel generators EP-07, EP-08, and EP-09. Attachment G or an equivalent form shall be used for this purpose. The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to Missouri Department of Natural Resources’ personnel upon request.
2. Records may be kept in either written or electronic form.

Reporting:
1. Special Condition 1.C: The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which records indicate an exceedance of the emission limit.
2. The permittee shall report any deviations from the emission limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds

Emission Limitations:
1. The permittee shall not cause or permit the emission into the atmosphere of gases containing more than 500 ppmv of sulfur dioxide or more than 35 mg/m³ of sulfuric acid or sulfur trioxide or any combination of these gases averaged on any consecutive three-hour time period.
2. The permittee shall not cause or permit the emission of sulfur compounds from any source, which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.
**Pollutant** | **Concentration by Volume** | **Remarks**
--- | --- | ---
Sulfur Dioxide (SO₂) | 0.5 ppm (1300 µg/m³) | 3-hour average not to be exceeded more than once per year
 | 75 ppb | 1-hour average; 3-year average of the 99th percentile of the daily maximum 1-hour average at each site monitor within an area
Hydrogen Sulfide (H₂S) | 0.05 ppm (70 µg/m³) | ½-hour average not to be exceeded over 2 times per year
 | 0.03 ppm (42 µg/m³) | ½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H₂SO₄) | 10 µg/m³ | 24-hour average not to be exceeded more than once in any 90 consecutive days
 | 30 µg/m³ | 1-hour average not to be exceeded more than once in any 2 consecutive days

**Monitoring/Recordkeeping:**
1. The permittee shall monitor the sulfur content of each delivery of fuel documenting that the sulfur content never exceeds 0.25932 percent.
2. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
3. Records may be kept in either written or electronic form.
4. All records shall be maintained for five years.

**Reporting:**
1. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
2. The permittee shall report any deviations from the emission limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

---

10 CSR 10-6.075 Maximum Achievable Control Technology Regulations

1Existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions must comply with the applicable emission limitations and operating limitations no later than May 3, 2013 [§63.6595(a)(1)]

**Standards:**
1. The permittee shall comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart. [§63.6600(d)]
2. The permittee shall only use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. [§63.6604]
3. The permittee shall be in compliance with the emission limitations and operating limitations in this subpart that apply at all times. [§63.6605(a)]
4. At all times the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good
air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee 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. [§63.6605(b)]

5. If the RICE are not equipped with a closed crankcase ventilation system, the permittee shall comply with either §63.6625(g)(1) or (2). The permittee shall 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. [§63.6625(g)]
   a) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or [§63.6625(g)(1)]
   b) 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. [§63.6625(g)(2)]

6. The permittee shall 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 Table 2c to this subpart apply. [§63.6625(h)]

Table 2c to Subpart ZZZZ of Part 63 — Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP

<table>
<thead>
<tr>
<th>RICE Type</th>
<th>Emission Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Emergency, non-black start stationary CI RICE &gt;500 HP</td>
<td>Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15% O₂; or Reduce CO emissions by 70% or more</td>
</tr>
</tbody>
</table>

Table 2b to Subpart ZZZZ of Part 63 — Operating Limitations for Existing Compression Ignition Stationary RICE >500 HP

<table>
<thead>
<tr>
<th>Compliance Method</th>
<th>Operational Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst</td>
<td>Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2” of H₂O at 100% load ± 10% from the pressure drop across the catalyst that was measured during the initial performance test; and Maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1350°F¹</td>
</tr>
<tr>
<td>CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst</td>
<td>Comply with any operating limitations approved by the Administrator</td>
</tr>
</tbody>
</table>

¹Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(g) for a different temperature range.
Performance Testing:

1. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three one-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart. [§63.6600]

2. The permittee shall conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply within 180 days after May 3, 2013 and according to the provisions in §63.7(a)(2). [§63.6610(a)]

3. The permittee 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 following conditions: [§63.6610(d)]
   a) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly. [§63.6610(d)(1)]
   b) The test must not be older than two years. [§63.6610(d)(2)]
   c) The test must be reviewed and accepted by the Administrator. [§63.6610(d)(3)]
   d) Either no process or equipment changes must have been made since the test was performed, or the permittee must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes. [§63.6610(d)(4)]
   e) The test must be conducted at any load condition within ± ten percent of 100 percent load. [§63.6610(d)(5)]

4. The permittee shall conduct subsequent performance tests as specified in Table 3 of this subpart. [§63.6615]

5. The permittee shall conduct each performance test in Tables 3 and 4 of this subpart that applies. [§63.6620(a)]

6. Each performance test shall be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If the permittee owns or operates a non-operational stationary RICE that is subject to performance testing, the permittee does not need to start up the engine solely to conduct the performance test. The permittee may conduct the performance test when the engine is started up again. [§63.6620(b)]

7. The permittee shall conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run shall last at least one hour. [§63.6620(d)]

8. The permittee shall use Equation 1 of this section to determine compliance with the percent reduction requirement:

\[
\frac{C_i - C_o}{C_i} \times 100 = R \quad \text{Equation 1}
\]

Where:
- \(C_i\) = concentration of CO at the control device inlet,
- \(C_o\) = concentration of CO at the control device outlet, and
- \(R\) = percent reduction of CO emissions. [§63.6620(e)(1)]

9. The permittee shall normalize the CO concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent CO2. If pollutant concentrations are to be corrected to 15 percent oxygen and CO2 concentration is measured in lieu of oxygen concentration measurement, a CO2 correction factor is needed. Calculate the CO2 correction factor as described in the following paragraphs: [§63.6620(e)(2)]
   a) 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:
\[ F_o = \frac{0.209F_d}{F_c} \quad \text{Equation 2} \]

Where:
- \( F_o \) = 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, \( \text{dsm}^3/J \) (dscf/10\(^6\) Btu).
- \( F_c \) = Ratio of the volume of CO\(_2\) produced to the gross calorific value of the fuel from Method 19, \( \text{dsm}^3/J \) (dscf/10\(^6\) Btu). [§63.6620(e)(2)(i)]

b) Calculate the CO\(_2\) correction factor for correcting measurement data to 15 percent oxygen, as follows:

\[ X_{co2} = \frac{5.9}{F_o} \quad \text{Equation 3} \]

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. [§63.6620(e)(2)(ii)]

c) Calculate the NO\(_x\) and SO\(_2\) gas concentrations adjusted to 15 percent O\(_2\) using CO\(_2\) as follows:

\[ C_{adj} = C_d \frac{X_{co2}}{\%CO_2} \quad \text{Equation 4} \]

Where:
- \( \% CO_2 \) = Measured CO\(_2\) concentration measured, dry basis, percent. [§63.6620(e)(2)(iii)]

10. If the permittee is complying with the emission limitation to reduce CO and is not using an oxidation catalyst, the permittee shall 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. The permittee shall not conduct the initial performance test until after the petition has been approved by the Administrator. [§63.6620(f)]

11. If the permittee petitions the Administrator for approval of operating limitations, the petition shall include the following information: [§63.6620(g)]

a) Identification of the specific parameters the permittee proposes to use as operating limitations; [§63.6620(g)(1)]

b) 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; [§63.6620(g)(2)]

c) A discussion of how the permittee will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations; [§63.6620(g)(3)]

d) A discussion identifying the methods the permittee will use to measure and the instruments the permittee will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and [§63.6620(g)(4)]

e) A discussion identifying the frequency and methods for recalibrating the instruments the permittee will use for monitoring these parameters. [§63.6620(g)(5)]

12. If the permittee petitions the Administrator for approval of no operating limitations, the petition shall include the following information: [§63.6620(h)]
a) 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; [§63.6620(h)(1)]

b) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions; [§63.6620(h)(2)]

c) 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; [§63.6620(h)(3)]

d) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how the permittee could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations; [§63.6620(h)(4)]

e) For the parameters, a discussion identifying the methods the permittee could use to measure them and the instruments the permittee could use to monitor them, as well as the relative accuracy and precision of the methods and instruments; [§63.6620(h)(5)]

f) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments the permittee could use to monitor them; and [§63.6620(h)(6)]

g) A discussion of why, from the permittee’s point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations. [§63.6620(h)(7)]

13. The engine percent load during a performance test shall 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 shall be included in the notification of compliance status. The following information shall 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 shall 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 shall be provided. [§63.6620(i)]
### Table 4 to Subpart ZZZZ of Part 63 — Requirements for Performance Tests

<table>
<thead>
<tr>
<th>Emission Limit</th>
<th>Performance Test Requirement</th>
<th>Equipment/Method</th>
<th>Additional Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce CO emissions</td>
<td>Measure the O₂ at the inlet and outlet of the control device; and Measure the CO at the inlet and the outlet of the control device</td>
<td>Portable CO and O₂ analyzer</td>
<td>Using ASTM D6522–00 (2005)(^a) (incorporated by reference, see §63.14). Measurements to determine O₂ shall be made at the same time as the measurements for CO concentration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Using ASTM D6522–00 (2005)(^ab) (incorporated by reference, see §63.14) or Method 10 of 40 CFR Appendix A. The CO concentration shall be at 15% O₂, dry basis</td>
</tr>
<tr>
<td>Limit the concentration of CO in the stationary RICE exhaust</td>
<td>Select the sampling port location and the number of traverse points; and Determine the O₂ concentration of the stationary RICE exhaust at the sampling port location; and Measure moisture content of the stationary RICE exhaust at the sampling port location; and Measure CO at the exhaust of the stationary RICE</td>
<td>Method 1 or 1A of 40 CFR Part 60, Appendix A §63.7(d)(1)(i) Method 3 or 3A or 3B of 40 CFR Part 60, Appendix A, or ASTM Method D6522–00 (2005) Method 4 of 40 CFR Part 60, Appendix A, or Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM D 6348–03 Method 10 of 40 CFR Part 60, Appendix A, ASTM Method D6522–00 (2005),(^a) Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348–03</td>
<td>If using a control device, the sampling site shall be located at the outlet of the control device Measurements to determine O₂ concentration shall be made at the same time and location as the measurements for CO concentration Measurements to determine moisture content shall be made at the same time and location as the measurements for CO concentration CO Concentration shall be at 15% O₂, dry basis. Results of this test consist of the average of the (3) 1-hour longer runs</td>
</tr>
</tbody>
</table>

\(^a\)The permittee may also use Methods 3A and 10 as options to ASTM–D6522–00 (2005). The permittee may obtain a copy of ASTM–D6522–00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTM–D6522–00 (2005) may be used to test both CI and SI stationary RICE.

\(^ab\)The permittee may also use Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348–03.

### Table 3 to Subpart ZZZZ of Part 63 — Subsequent Performance Tests

<table>
<thead>
<tr>
<th>RICE Type</th>
<th>Emission Limit</th>
<th>Subsequent Performance Testing Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing non-emergency, non-black start CI stationary RICE with a brake horsepower &gt;500 that are not limited use stationary RICE</td>
<td>Limit or reduce CO emissions</td>
<td>Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first</td>
</tr>
</tbody>
</table>
**Monitoring:**

1. If the permittee elects to install a CEMS as specified in Table 5 of this subpart, the permittee shall install, operate, and maintain a CEMS to monitor CO and either oxygen or CO\textsubscript{2} at both the inlet and the outlet of the control device according to the following requirements: [§63.6625(a)]

   a) Each CEMS shall be installed, operated, and maintained according to the applicable performance specifications of 40 CFR Part 60, Appendix B. [§63.6625(a)(1)]

   b) The permittee shall 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. [§63.6625(a)(2)]

   c) As specified in §63.8(c)(4)(ii), each CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. The permittee shall have at least two data points, with each representing a different 15-minute period, to have a valid hour of data. [§63.6625(a)(3)]

   d) The CEMS data shall be reduced as specified in §63.8(g)(2) and recorded in ppm or ppb as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO\textsubscript{2} concentration. [§63.6625(a)(4)]

2. If the permittee is required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, the permittee install, operate, and maintain each CPMS according to the following requirements: [§63.6625(b)]

   a) The permittee shall prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in §63.6625(b)(1)(i) through (v) and in §63.8(d). As specified in §63.8(f)(4), the permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in §63.6625(b)(1) through (5) in the site-specific monitoring plan. [§63.6625(b)(1)]

   i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations; [§63.6625(b)(1)(i)]

   ii) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements; [§63.6625(b)(1)(ii)]

   iii) Equipment performance evaluations, system accuracy audits, or other audit procedures; [§63.6625(b)(1)(iii)]

   iv) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1) and (c)(3); and [§63.6625(b)(1)(iv)]

   v) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i). [§63.6625(b)(1)(v)]

   b) The permittee shall install, operate, and maintain each CPMS in continuous operation according to the procedures in the site-specific monitoring plan. [§63.6625(b)(2)]

   c) The CPMS shall collect data at least once every 15 minutes (see also §63.6635). [§63.6625(b)(3)]

   d) For a CPMS for measuring temperature range, the temperature sensor shall have a minimum tolerance of 2.8°C (5°F) or one percent of the measurement range, whichever is larger. [§63.6625(b)(4)]
e) The permittee shall conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually. [§63.6625(b)(5)]

f) The permittee shall conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan. [§63.6625(b)(6)]

3. The permittee shall monitor and collect data according to this section. [§63.6635(a)]

4. Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the permittee shall 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. [§63.6635(b)]

5. The permittee 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. The permittee shall, however, use all the valid data collected during all other periods. [§63.6635(c)]
### Table 5 to Subpart ZZZZ of Part 63 — Initial Compliance With Emission Limits and Operating Limits

<table>
<thead>
<tr>
<th>Compliance Method</th>
<th>The permittee has demonstrated initial compliance if…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce CO emissions and using oxidation catalyst, and using a CPMS</td>
<td>The average reduction of emissions of CO determined from the initial performance test achieves the required CO % reduction; and</td>
</tr>
<tr>
<td></td>
<td>The permittee installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and</td>
</tr>
<tr>
<td></td>
<td>The permittee recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</td>
</tr>
<tr>
<td>Limit the concentration of CO, using oxidation catalyst, and using a CPMS</td>
<td>The average CO concentration determined from the initial performance test is ≤ to the CO emission limitation; and</td>
</tr>
<tr>
<td></td>
<td>The permittee installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and</td>
</tr>
<tr>
<td></td>
<td>The permittee recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</td>
</tr>
<tr>
<td>Reduce CO emissions and not using oxidation catalyst</td>
<td>The average reduction of emissions of CO determined from the initial performance test achieves the required CO % reduction; and</td>
</tr>
<tr>
<td></td>
<td>The permittee installed a CPMS to continuously monitor operating parameters approved by the Administrator according to the requirements in §63.6625(b); and</td>
</tr>
<tr>
<td></td>
<td>The permittee recorded the approved operating parameters during the initial performance test.</td>
</tr>
<tr>
<td>Limit the concentration of CO, and not using oxidation catalyst</td>
<td>The average CO concentration determined from the initial performance test is ≤ to the CO emission limitation; and</td>
</tr>
<tr>
<td></td>
<td>The permittee installed a CPMS to continuously monitor operating parameters approved by the Administrator according to the requirements in §63.6625(b); and</td>
</tr>
<tr>
<td></td>
<td>The permittee recorded the approved operating parameters during the initial performance test.</td>
</tr>
<tr>
<td>Reduce CO emissions, and using a CEMS</td>
<td>The permittee installed a CEMS to continuously monitor CO and either O₂ or CO₂ at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and</td>
</tr>
<tr>
<td></td>
<td>The permittee conducted a performance evaluation of the CEMS using PS 3 and 4A of 40 CFR Part 60, Appendix B; and</td>
</tr>
<tr>
<td></td>
<td>The average reduction of CO calculated using §63.6620 is ≥ the required % reduction. The initial test comprises the 1st 4-hour period after successful validation of the CEMS. Compliance is based on the average % reduction achieved during the 4-hour period.</td>
</tr>
<tr>
<td>Limit the concentration of CO, and using a CEMS</td>
<td>The permittee installed a CEMS to continuously monitor CO and either O₂ or CO₂ at the outlet of the oxidation catalyst according to the requirements in §63.6625(a); and</td>
</tr>
<tr>
<td></td>
<td>The permittee conducted a performance evaluation of the CEMS using PS 3 and 4A of 40 CFR Part 60, Appendix B; and</td>
</tr>
<tr>
<td></td>
<td>The average concentration of CO calculated using §63.6620 is ≤ to the CO emission limitation. The initial test comprises the 1st 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period.</td>
</tr>
</tbody>
</table>

**Initial Compliance:**

1. The permittee shall demonstrate initial compliance with each emission and operating limitation that applies according to Table 5 of this subpart. [§63.6630(a)]
2. During the initial performance test, the permittee shall establish each operating limitation in Table 2b of this subpart that applies. [§63.6630(b)]
3. The permittee shall submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645. [§63.6630(c)]
Continuous Compliance:

1. The permittee shall demonstrate continuous compliance with each emission limitation and operating limitation in Tables 2b and 2c to this subpart that apply according to methods specified in Table 6 to this subpart. [§63.6640(a)]

2. The permittee shall report each instance in which the permittee did not meet each emission limitation or operating limitation in Tables 2b and 2c to this subpart that apply. These instances are deviations from the emission and operating limitations in this subpart. These deviations shall be reported according to the requirements in §63.6650. If the permittee changes catalysts, the permittee shall reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee shall also conduct a performance test to demonstrate that the permittee is meeting the required emission limitation applicable to the stationary RICE. [§63.6640(b)]

3. The permittee shall also report each instance in which the permittee did not meet the requirements in Subpart A to this part that apply. [§63.6640(e)]

Table 6 to Subpart ZZZZ of Part 63 — Continuous Compliance With Emission Limits, Operating Limits, Work Practices, and Management Practices

<table>
<thead>
<tr>
<th>Compliance Method</th>
<th>The permittee shall demonstrate continuous compliance by…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst or NSCR</td>
<td>Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO to demonstrate that the required CO percent reduction is achieved or that the emissions remain at or below the CO concentration limit; and</td>
</tr>
<tr>
<td></td>
<td>Collecting the catalyst inlet temperature data according to §63.6625(b); and</td>
</tr>
<tr>
<td></td>
<td>Reducing these data to 4-hour rolling averages; and</td>
</tr>
<tr>
<td></td>
<td>Maintaining the 4-hour rolling averages within the operating limits for the catalyst inlet temperature; and</td>
</tr>
<tr>
<td></td>
<td>Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limit established during the performance test.</td>
</tr>
<tr>
<td>Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and not using oxidation catalyst or NSCR</td>
<td>Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO to demonstrate that the required CO percent reduction is achieved or that the emissions remain at or below the CO concentration limit; and</td>
</tr>
<tr>
<td></td>
<td>Collecting the approved operating parameter (if any) data according to §63.6625(b); and</td>
</tr>
<tr>
<td></td>
<td>Reducing these data to 4-hour rolling averages; and</td>
</tr>
<tr>
<td></td>
<td>Maintaining the 4-hour rolling averages within the operating limits for the operating parameters established during the performance test.</td>
</tr>
</tbody>
</table>

Notifications:

1. The permittee shall 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 by the dates specified.[§63.6645(a)]

2. The permittee shall 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). [§63.6645(g)]

3. The permittee shall submit a Notification of Compliance Status according to §63.9(h)(2)(ii). [§63.6645(h)]

   a) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, the permittee shall submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration. [§63.6645(h)(1)]
b) 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, the permittee shall 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). [§63.6645(h)(2)]

Recordkeeping:

1. The permittee shall retain the records described in §63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c). [§63.6655(a)]
   a) A copy of each notification and report that the permittee submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted, according to the requirement in §63.10(b)(2)(xiv). [§63.6655(a)(1)]
   b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [§63.6655(a)(2)]
   c) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii). [§63.6655(a)(3)]
   d) Records of all required maintenance performed on the air pollution control and monitoring equipment. [§63.6655(a)(4)]
   e) 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. [§63.6655(a)(5)]

2. For each CEMS or CPMS, the permittee shall retain the following records: [§63.6655(b)]
   a) Records described in §63.10(b)(2)(vi) through (xi). [§63.6655(b)(1)]
   b) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3). [§63.6655(b)(2)]
   c) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable. [§63.6655(b)(3)]

3. The permittee shall retain the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limit that applies. [§63.6655(d)]

4. The permittee shall retain each record readily accessible in hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). [§63.6660(c)]

5. These records shall be kept on-site, and shall be made available to Department personnel upon request.

Reporting:

1. The permittee shall submit each report in Table 7 of this subpart that applies. [§63.6650(a)]

2. Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), the permittee shall submit each report by the date in Table 7 of this subpart and according to the following requirements: [§63.6650(b)]
   a) For semi-annual Compliance Reports, the first Compliance Report shall cover the period beginning May 3, 2013 and ending on June 30. [§63.6650(b)(1)]
   b) For semi-annual Compliance Reports, the first Compliance Report shall be postmarked or delivered no later than July 31. [§63.6650(b)(2)]
c) For semi-annual Compliance Reports, each subsequent Compliance Report shall cover the semi-annual reporting period from January 1 through June 30 or the semi-annual reporting period from July 1 through December 31. [§63.6650(b)(3)]

d) For semi-annual Compliance Reports, each subsequent Compliance Report shall be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semi-annual reporting period. [§63.6650(b)(4)]

e) The permittee may submit the first and subsequent Compliance Reports as part of their 40 CFR Part 70 semi-annual Compliance Reports rather than on the above schedule. [§63.6650(b)(5)]

3. The Compliance Report shall contain the following information: [§63.6650(c)]
   a) Company name and address. [§63.6650(c)(1)]
   b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [§63.6650(c)(2)]
   c) Date of report and beginning and ending dates of the reporting period. [§63.6650(c)(3)]
   d) If a malfunction occurred during the reporting period, the Compliance Report shall 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 limit to be exceeded. The report shall also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction. [§63.6650(c)(4)]
   e) If there are no deviations from any emission or operating limits that apply, a statement that there were no deviations from the emission or operating limits during the reporting period. [§63.6650(c)(5)]
   f) 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. [§63.6650(c)(6)]

4. For each deviation from an emission or operating limit that occurs for a stationary RICE where the permittee is not using a CMS to comply with the emission or operating limits in this subpart, the Compliance Report shall contain the information in §63.6650(c)(1) through (4) and the following information: [§63.6650(d)]
   a) The total operating time of the stationary RICE at which the deviation occurred during the reporting period. [§63.6650(d)(1)]
   b) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [§63.6650(d)(2)]

5. For each deviation from an emission or operating limit occurring for a stationary RICE where the permittee is using a CMS to comply with the emission and operating limits in this subpart, the permittee shall include the information in §63.6650(c)(1) through (4) and the following information: [§63.6650(e)]
   a) The date and time that each malfunction started and stopped. [§63.6650(e)(1)]
   b) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks. [§63.6650(e)(2)]
   c) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8). [§63.6650(e)(3)]
   d) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period. [§63.6650(e)(4)]
   e) 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. [§63.6650(e)(5)]
f) 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. [§63.6650(e)(6)]

g) 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. [§63.6650(e)(7)]

h) An identification of each parameter and pollutant (CO) that was monitored at the stationary RICE. [§63.6650(e)(8)]

i) A brief description of the stationary RICE. [§63.6650(e)(9)]

j) A brief description of the CMS. [§63.6650(e)(10)]

k) The date of the latest CMS certification or audit. [§63.6650(e)(11)]

l) A description of any changes in CMS, processes, or controls since the last reporting period. [§63.6650(e)(12)]

6. The permittee shall report all deviations as defined in this subpart in the semi-annual monitoring report required by 40 CFR 70.6(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 semi-annual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A), and the Compliance Report includes all required information concerning deviations from any emission or operating limit in this subpart, submission of the Compliance Report shall be deemed to satisfy any obligation to report the same deviations in the semi-annual 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. [§63.6650(f)]

7. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.

8. The permittee shall report any deviations from the standards, performance testing, monitoring, initial compliance, continuous compliance, notifications, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

Table 7 to Subpart ZZZZ of Part 63 — Requirements for Reports

<table>
<thead>
<tr>
<th>The Compliance Report shall contain…</th>
<th>The report shall be submitted…</th>
</tr>
</thead>
<tbody>
<tr>
<td>If there are no deviations from any emission limits or operating limits that apply, a statement that there were no deviations from the emission limits or operating limits during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(e)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or</td>
<td>Semi-annually according to the requirements in §63.6650(b)</td>
</tr>
<tr>
<td>If a deviation from any emission limit or operating limit occurred during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or</td>
<td></td>
</tr>
<tr>
<td>If a malfunction occurred during the reporting period, the information in §63.6650(c)(4)</td>
<td></td>
</tr>
</tbody>
</table>
EP-10 Generator

<table>
<thead>
<tr>
<th>Description</th>
<th>Manufacturer/Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989 Fuel Oil #2/Natural Gas Fired, 54 MMBtu/hr, 6.3 MWe</td>
<td>Cooper Bessemer, LSVB-20-G.D.C.</td>
</tr>
</tbody>
</table>

PERMIT CONDITION EP-10 - 001
10 CSR 10-6.060 Construction Permits Required
Construction Permit 1191-010A, Issued April 29, 1992

**Emission Limitation:**
1. Special Condition 1: Best Available Control Technology (BACT) for the emissions of NOx from the operation of EP-10 Generator is set at 1150 ppmv, based on a three-hour rolling average, corrected to 15 percent oxygen, dry basis, 96 pounds per hour one-hour average.
2. Special Condition 2: BACT for the emissions of CO shall be considered to be the optimization of engine efficiency by redesign, which has been incorporated in the engine under review. This is to result in an emission rate of CO of no more than 2.0 grams per brake horsepower hour at 100 percent load, three-hour average.
3. Special Condition 3: BACT for the emissions of VOCs shall be considered to be the optimization of engine efficiency by redesign, which has been incorporated in the engine under review. This is to result in an emission rate of VOCs of no more than 0.7 grams per brake horsepower hour at 100 percent load, three-hour average.
4. Special Condition 4: The emissions from the operation of EP-10 Generator shall not exceed the de minimis emissions limits of 15 tons per year for PM10 or 40 tons per year for SOx.
5. Special Condition 10: SOx shall be measured by fuel analysis rather than by Method 6 or 6C. There being no SOx reduction in this engine, this method shall provide acceptable accuracy. The emission rate of SOx shall not exceed the de minimis emission rate for SOx of 40 tons per year.

**Operational Limitations:**
1. Special Condition 12: The permittee shall adhere to the requirements of 10 CSR 10-6.050 Start-Up, Shutdown, and Malfunction Conditions at all times that this engine is operated.
2. Special Condition 13: No fuels other than natural gas or fuel oil #2 shall be combusted in EP-10 Generator at any time.

**Monitoring/Recordkeeping:**
Special Condition 11: The permittee shall monitor the sulfur content of the fuel being fired in EP-10 Generator. The frequency of determination of these values shall be as follows:
1. If the engine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
2. If the engine supplied fuel without intermediate bulk storage, the values shall be determined and recorded daily. Owners, operators, or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by both the Director of the Department of Natural resources, and by the Administrator of the US Environmental Protection Agency, before they can be used to comply with this condition.
**Reporting:***

1. Special Condition 14: The permittee shall ensure that the emissions of PM$_{10}$ and SO$_x$ from the operation of this engine not exceed the de minimis emission limits for either PM$_{10}$ (15 tons per year) or SO$_x$ (40 tons per year). To that end, the permittee shall record the amounts of both natural gas and fuel oil #2 combusted in the engine on a monthly basis. Calculations shall be performed which shall indicate the theoretical emission rates of both PM$_{10}$ and SO$_x$ for that month, expressed in ton. Records shall be kept on-site which indicate:
   a) Month of record,
   b) Calculated emissions of PM$_{10}$ and SO$_x$ for that month,
   c) A summary of the calculated emissions of PM$_{10}$ and SO$_x$ for the previous twelve month period, and
   d) A statement that the annual emissions of PM$_{10}$ and SO$_x$ may not exceed the de minimis emissions levels in any twelve month period.

2. These records shall be kept on-site, and shall be made available to Department personnel upon request.

3. Records may be kept in either written or electronic form.

4. All records shall be maintained for five years.

**Reporting:***

1. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.

2. The permittee shall report any deviations from the emission limitations, operational limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

<table>
<thead>
<tr>
<th>PERMIT CONDITION EP-10 - 002</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds</td>
</tr>
</tbody>
</table>

**Emission Limitations:**

1. The permittee shall not cause or permit the emission into the atmosphere of gases containing more than 500 ppmv of sulfur dioxide or more than 35 mg/m$^3$ of sulfuric acid or sulfur trioxide or any combination of these gases averaged on any consecutive three-hour time period.

2. The permittee shall not cause or permit the emission of sulfur compounds from any source, which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 *Ambient Air Quality Standards.*
### Pollutant Concentration by Volume

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Concentration by Volume</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfur Dioxide (SO₂)</td>
<td>0.5 ppm (1300 µg/m³)</td>
<td>3-hour average not to be exceeded more than once per year</td>
</tr>
<tr>
<td></td>
<td>75 ppb</td>
<td>1-hour average; 3-year average of the 99th percentile of the daily maximum 1-hour average at each site monitor within an area</td>
</tr>
<tr>
<td>Hydrogen Sulfide (H₂S)</td>
<td>0.05 ppm (70 µg/m³)</td>
<td>½-hour average not to be exceeded over 2 times per year</td>
</tr>
<tr>
<td></td>
<td>0.03 ppm (42 µg/m³)</td>
<td>½-hour average not to be exceeded over 2 times in any 5 consecutive days</td>
</tr>
<tr>
<td>Sulfuric Acid (H₂SO₄)</td>
<td>10 µg/m³</td>
<td>24-hour average not to be exceeded more than once in any 90 consecutive days</td>
</tr>
<tr>
<td></td>
<td>30 µg/m³</td>
<td>1-hour average not to be exceeded more than once in any 2 consecutive days</td>
</tr>
</tbody>
</table>

### Monitoring/Recordkeeping:
1. The permittee shall monitor the sulfur content of each delivery of fuel documenting that the sulfur content never exceeds 0.25932 percent.
2. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
3. Records may be kept in either written or electronic form.
4. All records shall be maintained for five years.

### Reporting:
1. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
2. The permittee shall report any deviations from the emission limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

---

PERMIT CONDITION EP-10 – 003

10 CSR 10-6.075 Maximum Achievable Control Technology Regulations

Existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions must comply with the applicable emission limitations and operating limitations no later than May 3, 2013 [§63.6595(a)(1)]

### Standards:
1. The permittee shall comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart. [§63.6600(d)]
2. The permittee shall only use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. [§63.6604]
3. The permittee shall be in compliance with the emission limitations and operating limitations in this subpart that apply at all times. [§63.6605(a)]
4. At all times the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good
air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee 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. [§63.6605(b)]

5. If the RICE are not equipped with a closed crankcase ventilation system, the permittee shall comply with either §63.6625(g)(1) or (2). The permittee shall 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. [§63.6625(g)]

   a) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or [§63.6625(g)(1)]

   b) 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. [§63.6625(g)(2)]

6. The permittee shall 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 Table 2c to this subpart apply. [§63.6625(h)]

---

### Table 2c to Subpart ZZZZ of Part 63 — Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP

<table>
<thead>
<tr>
<th>RICE Type</th>
<th>Emission Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Emergency, non-black start stationary CI RICE &gt;500 HP</td>
<td>Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15% O₂; or Reduce CO emissions by 70% or more</td>
</tr>
</tbody>
</table>

### Table 2b to Subpart ZZZZ of Part 63 — Operating Limitations for Existing Compression Ignition Stationary RICE >500 HP

<table>
<thead>
<tr>
<th>Compliance Method</th>
<th>Operational Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst</td>
<td>Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2” of H₂O at 100% load ± 10% from the pressure drop across the catalyst that was measured during the initial performance test; and Maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1350°F¹</td>
</tr>
<tr>
<td>CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst</td>
<td>Comply with any operating limitations approved by the Administrator</td>
</tr>
</tbody>
</table>

¹Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(g) for a different temperature range.
Performance Testing:

1. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three one-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart. [§63.6600]

2. The permittee shall conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply within 180 days after May 3, 2013 and according to the provisions in §63.7(a)(2). [§63.6610(a)]

3. The permittee 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 following conditions: [§63.6610(d)]

   a) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly. [§63.6610(d)(1)]

   b) The test must not be older than two years. [§63.6610(d)(2)]

   c) The test must be reviewed and accepted by the Administrator. [§63.6610(d)(3)]

   d) Either no process or equipment changes must have been made since the test was performed, or the permittee must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes. [§63.6610(d)(4)]

   e) The test must be conducted at any load condition within ± ten percent of 100 percent load. [§63.6610(d)(5)]

4. The permittee shall conduct subsequent performance tests as specified in Table 3 of this subpart. [§63.6615]

5. The permittee shall conduct each performance test in Tables 3 and 4 of this subpart that applies. [§63.6620(a)]

6. Each performance test shall be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If the permittee owns or operates a non-operational stationary RICE that is subject to performance testing, the permittee does not need to start up the engine solely to conduct the performance test. The permittee may conduct the performance test when the engine is started up again. [§63.6620(b)]

7. The permittee shall conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run shall last at least one hour. [§63.6620(d)]

8. The permittee shall use Equation 1 of this section to determine compliance with the percent reduction requirement:

   \[
   \frac{C_i - C_o}{C_i} \times 100 = R \quad \text{Equation 1}
   \]

   Where:
   
   \( C_i \) = concentration of CO at the control device inlet,
   
   \( C_o \) = concentration of CO at the control device outlet, and
   
   \( R \) = percent reduction of CO emissions. [§63.6620(e)(1)]

9. The permittee shall normalize the CO concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent CO2. If pollutant concentrations are to be corrected to 15 percent oxygen and CO2 concentration is measured in lieu of oxygen concentration measurement, a CO2 correction factor is needed. Calculate the CO2 correction factor as described in the following paragraphs: [§63.6620(e)(2)]

   a) 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:
\[ F_0 = \frac{0.209 F_d}{F_c} \]  
Equation 2

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/10\(^6\) 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/10\(^6\) Btu). [§63.6620(e)(2)(i)]

b) Calculate the CO\(_2\) correction factor for correcting measurement data to 15 percent oxygen, as follows:

\[ X_{CO_2} = \frac{5.9}{F_0} \]  
Equation 3

Where:
- \( X_{CO_2} \) = CO\(_2\) correction factor, percent.
- 5.9 = 20.9 percent O\(_2\) − 15 percent O\(_2\), the defined O\(_2\) correction value, percent. [§63.6620(e)(2)(ii)]

c) Calculate the NO\(_x\) and SO\(_2\) gas concentrations adjusted to 15 percent O\(_2\) using CO\(_2\) as follows:

\[ C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \]  
Equation 4

Where:
- \( \%CO_2 \) = Measured CO\(_2\) concentration measured, dry basis, percent. [§63.6620(e)(2)(iii)]

10. If the permittee is complying with the emission limitation to reduce CO and is not using an oxidation catalyst, the permittee shall 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. The permittee shall not conduct the initial performance test until after the petition has been approved by the Administrator. [§63.6620(f)]

11. If the permittee petitions the Administrator for approval of operating limitations, the petition shall include the following information: [§63.6620(g)]

a) Identification of the specific parameters the permittee proposes to use as operating limitations; [§63.6620(g)(1)]

b) 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; [§63.6620(g)(2)]

c) A discussion of how the permittee will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations; [§63.6620(g)(3)]

d) A discussion identifying the methods the permittee will use to measure and the instruments the permittee will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and [§63.6620(g)(4)]

e) A discussion identifying the frequency and methods for recalibrating the instruments the permittee will use for monitoring these parameters. [§63.6620(g)(5)]

12. If the permittee petitions the Administrator for approval of no operating limitations, the petition shall include the following information: [§63.6620(h)]
a) 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; [§63.6620(h)(1)]

b) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions; [§63.6620(h)(2)]

c) 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; [§63.6620(h)(3)]

d) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how the permittee could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations; [§63.6620(h)(4)]

e) For the parameters, a discussion identifying the methods the permittee could use to measure them and the instruments the permittee could use to monitor them, as well as the relative accuracy and precision of the methods and instruments; [§63.6620(h)(5)]

f) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments the permittee could use to monitor them; and [§63.6620(h)(6)]

g) A discussion of why, from the permittee’s point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations. [§63.6620(h)(7)]

13. The engine percent load during a performance test shall 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 shall be included in the notification of compliance status. The following information shall 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 shall 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 shall be provided. [§63.6620(i)]
### Table 4 to Subpart ZZZZ of Part 63 — Requirements for Performance Tests

<table>
<thead>
<tr>
<th>Emission Limit</th>
<th>Performance Test Requirement</th>
<th>Equipment/Method</th>
<th>Additional Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce CO emissions</td>
<td>Measure the (O_2) at the inlet and outlet of the control device; and</td>
<td>Portable CO and (O_2) analyzer</td>
<td>Using ASTM D6522–00 (2005)(^\text{a}) (incorporated by reference, see §63.14). Measurements to determine (O_2) shall be made at the same time as the measurements for CO concentration</td>
</tr>
<tr>
<td></td>
<td>Measure the CO at the inlet and the outlet of the control device</td>
<td></td>
<td>Using ASTM D6522–00 (2005)(^\text{a}) (incorporated by reference, see §63.14) or Method 10 of 40 CFR Appendix A. The CO concentration shall be at 15% (O_2), dry basis</td>
</tr>
<tr>
<td>Limit the concentration of CO in the stationary RICE exhaust</td>
<td>Select the sampling port location and the number of traverse points; and</td>
<td>Method 1 or 1A of 40 CFR Part 60, Appendix A §63.7(d)(1)(i)</td>
<td>If using a control device, the sampling site shall be located at the outlet of the control device</td>
</tr>
<tr>
<td></td>
<td>Determine the (O_2) concentration of the stationary RICE exhaust at the sampling port location; and</td>
<td>Method 3 or 3A or 3B of 40 CFR Part 60, Appendix A, or ASTM Method D6522–00 (2005)</td>
<td>Measurements to determine (O_2) concentration shall be made at the same time and location as the measurements for CO concentration</td>
</tr>
<tr>
<td></td>
<td>Measure moisture content of the stationary RICE exhaust at the sampling port location; and</td>
<td>Method 4 of 40 CFR Part 60, Appendix A, or Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM D 6348–03</td>
<td>Measurements to determine moisture content shall be made at the same time and location as the measurements for CO concentration</td>
</tr>
<tr>
<td></td>
<td>Measure CO at the exhaust of the stationary RICE</td>
<td>Method 10 of 40 CFR Part 60, Appendix A, ASTM Method D6522–00 (2005),(^\text{a}) Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348–03</td>
<td>CO Concentration shall be at 15% (O_2), dry basis. Results of this test consist of the average of the (3) 1-hour longer runs</td>
</tr>
</tbody>
</table>

\(^\text{a}\)The permittee may also use Methods 3A and 10 as options to ASTM–D6522–00 (2005). The permittee may obtain a copy of ASTM–D6522–00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTM–D6522–00 (2005) may be used to test both CI and SI stationary RICE.

\(^\text{b}\)The permittee may also use Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348–03.

### Table 3 to Subpart ZZZZ of Part 63 — Subsequent Performance Tests

<table>
<thead>
<tr>
<th>RICE Type</th>
<th>Emission Limit</th>
<th>Subsequent Performance Testing Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing non-emergency, non-black start CI stationary RICE with a brake horsepower &gt;500 that are not limited use stationary RICE</td>
<td>Limit or reduce CO emissions</td>
<td>Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first</td>
</tr>
</tbody>
</table>
**Monitoring:**

1. If the permittee elects to install a CEMS as specified in Table 5 of this subpart, the permittee shall install, operate, and maintain a CEMS to monitor CO and either oxygen or CO₂ at both the inlet and the outlet of the control device according to the following requirements: [§63.6625(a)]

   a) Each CEMS shall be installed, operated, and maintained according to the applicable performance specifications of 40 CFR Part 60, Appendix B. [§63.6625(a)(1)]

   b) The permittee shall 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. [§63.6625(a)(2)]

   c) As specified in §63.8(c)(4)(ii), each CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. The permittee shall have at least two data points, with each representing a different 15-minute period, to have a valid hour of data. [§63.6625(a)(3)]

   d) The CEMS data shall be reduced as specified in §63.8(g)(2) and recorded in ppm or ppb as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO₂ concentration. [§63.6625(a)(4)]

2. If the permittee is required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, the permittee install, operate, and maintain each CPMS according to the following requirements: [§63.6625(b)]

   a) The permittee shall prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in §63.6625(b)(1)(i) through (v) and in §63.8(d). As specified in §63.8(f)(4), the permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in §63.6625(b)(1) through (5) in the site-specific monitoring plan. [§63.6625(b)(1)]

   i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations; [§63.6625(b)(1)(i)]

   ii) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements; [§63.6625(b)(1)(ii)]

   iii) Equipment performance evaluations, system accuracy audits, or other audit procedures; [§63.6625(b)(1)(iii)]

   iv) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1) and (c)(3); and [§63.6625(b)(1)(iv)]

   v) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i). [§63.6625(b)(1)(v)]

   b) The permittee shall install, operate, and maintain each CPMS in continuous operation according to the procedures in the site-specific monitoring plan. [§63.6625(b)(2)]

   c) The CPMS shall collect data at least once every 15 minutes (see also §63.6635). [§63.6625(b)(3)]

   d) For a CPMS for measuring temperature range, the temperature sensor shall have a minimum tolerance of 2.8°C (5°F) or one percent of the measurement range, whichever is larger. [§63.6625(b)(4)]
e) The permittee shall conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually. [§63.6625(b)(5)]

f) The permittee shall conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan. [§63.6625(b)(6)]

3. The permittee shall monitor and collect data according to this section. [§63.6635(a)]

4. Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the permittee shall 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. [§63.6635(b)]

5. The permittee 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. The permittee shall, however, use all the valid data collected during all other periods. [§63.6635(c)]
Table 5 to Subpart ZZZZ of Part 63 — Initial Compliance With Emission Limits and Operating Limits

<table>
<thead>
<tr>
<th>Compliance Method</th>
<th>The permittee has demonstrated initial compliance if…</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reduce CO emissions and using oxidation catalyst, and using a CPMS</strong></td>
<td>The avg. reduction of emissions of CO determined from the initial performance test achieves the required CO % reduction; and The permittee installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and The permittee recorded the catalyst pressure drop and catalyst inlet temp. during the initial performance test.</td>
</tr>
<tr>
<td><strong>Limit the conc. of CO, using oxidation catalyst, and using a CPMS</strong></td>
<td>The avg. CO conc. determined from the initial performance test is ≤ the CO emission limitation; and The permittee installed a CPMS to continuously monitor catalyst inlet temp. according to the requirements in §63.6625(b); and The permittee recorded the catalyst pressure drop and catalyst inlet temp. during the initial performance test.</td>
</tr>
<tr>
<td><strong>Reduce CO emissions and not using oxidation catalyst</strong></td>
<td>The avg. reduction of emissions of CO determined from the initial performance test achieves the required CO % reduction; and The permittee installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and The permittee recorded the approved operating parameters (if any) during the initial performance test.</td>
</tr>
<tr>
<td><strong>Limit the conc. of CO, and not using oxidation catalyst</strong></td>
<td>The avg. CO conc. determined from the initial performance test is ≤ the CO emission limitation; and The permittee installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and The permittee recorded the approved operating parameters (if any) during the initial performance test.</td>
</tr>
<tr>
<td><strong>Reduce CO emissions, and using a CEMS</strong></td>
<td>The permittee installed a CEMS to continuously monitor CO and either O₂ or CO₂ at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and The permittee conducted a performance evaluation of the CEMS using PS 3 and 4A of 40 CFR Part 60, Appendix B; and The avg. reduction of CO calculated using §63.6620 is ≥ the required % reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the avg. % reduction achieved during the 4-hour period.</td>
</tr>
<tr>
<td><strong>Limit the conc. of CO, and using a CEMS</strong></td>
<td>The permittee installed a CEMS to continuously monitor CO and either O₂ or CO₂ at the outlet of the oxidation catalyst according to the requirements in §63.6625(a); and The permittee conducted a performance evaluation of the CEMS using PS 3 and 4A of 40 CFR Part 60, Appendix B; and The avg. conc. of CO calculated using §63.6620 is ≤ the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the avg. conc. measured during the 4-hour period.</td>
</tr>
</tbody>
</table>

**Initial Compliance:**
1. The permittee shall demonstrate initial compliance with each emission and operating limitation that applies according to Table 5 of this subpart. [§63.6630(a)]
2. During the initial performance test, the permittee shall establish each operating limitation in Table 2b of this subpart that applies. [§63.6630(b)]
3. The permittee shall submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645. [§63.6630(c)]
Continuous Compliance:
1. The permittee shall demonstrate continuous compliance with each emission limitation and operating limitation in Tables 2b and 2c to this subpart that apply according to methods specified in Table 6 to this subpart. \[§63.6640(a)\]
2. The permittee shall report each instance in which the permittee did not meet each emission limitation or operating limitation in Tables 2b and 2c to this subpart that apply. These instances are deviations from the emission and operating limitations in this subpart. These deviations shall be reported according to the requirements in §63.6650. If the permittee changes catalysts, the permittee shall reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee shall also conduct a performance test to demonstrate that the permittee is meeting the required emission limitation applicable to the stationary RICE. \[§63.6640(b)\]
3. The permittee shall also report each instance in which the permittee did not meet the requirements in Subpart A to this part that apply. \[§63.6640(e)\]

Table 6 to Subpart ZZZZ of Part 63 — Continuous Compliance With Emission Limits, Operating Limits, Work Practices, and Management Practices

<table>
<thead>
<tr>
<th>Compliance Method</th>
<th>The permittee shall demonstrate continuous compliance by…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst or NSCR</td>
<td>Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO to demonstrate that the required CO percent reduction is achieved or that the emissions remain at or below the CO concentration limit; and Collecting the catalyst inlet temperature data according to §63.6625(b); and Reducing these data to 4-hour rolling averages; and Maintaining the 4-hour rolling averages within the operating limits for the catalyst inlet temperature; and Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limit established during the performance test.</td>
</tr>
<tr>
<td>Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and not using oxidation catalyst or NSCR</td>
<td>Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO to demonstrate that the required CO percent reduction is achieved or that the emissions remain at or below the CO concentration limit; and Collecting the approved operating parameter (if any) data according to §63.6625(b); and Reducing these data to 4-hour rolling averages; and Maintaining the 4-hour rolling averages within the operating limits for the operating parameters established during the performance test.</td>
</tr>
</tbody>
</table>

Notifications:
1. The permittee shall 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 by the dates specified.\[§63.6645(a)\]
2. The permittee shall 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). \[§63.6645(g)\]
3. The permittee shall submit a Notification of Compliance Status according to §63.9(h)(2)(ii). \[§63.6645(h)\]
   a) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, the permittee shall submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration. \[§63.6645(h)(1)\]
b) 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, the permittee shall 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). [§63.6645(h)(2)]

Recordkeeping:
1. The permittee shall retain the records described in §63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c). [§63.6655(a)]
   a) A copy of each notification and report that the permittee submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted, according to the requirement in §63.10(b)(2)(xiv). [§63.6655(a)(1)]
   b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [§63.6655(a)(2)]
   c) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii). [§63.6655(a)(3)]
   d) Records of all required maintenance performed on the air pollution control and monitoring equipment. [§63.6655(a)(4)]
   e) 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. [§63.6655(a)(5)]
2. For each CEMS or CPMS, the permittee shall retain the following records: [§63.6655(b)]
   a) Records described in §63.10(b)(2)(vi) through (xi). [§63.6655(b)(1)]
   b) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3). [§63.6655(b)(2)]
   c) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable. [§63.6655(b)(3)]
3. The permittee shall retain the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limit that applies. [§63.6655(d)]
4. The permittee shall retain each record readily accessible in hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). [§63.6660(c)]
5. These records shall be kept on-site, and shall be made available to Department personnel upon request.

Reporting:
1. The permittee shall submit each report in Table 7 of this subpart that applies. [§63.6650(a)]
2. Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), the permittee shall submit each report by the date in Table 7 of this subpart and according to the following requirements: [§63.6650(b)]
   a) For semi-annual Compliance Reports, the first Compliance Report shall cover the period beginning May 3, 2013 and ending on June 30. [§63.6650(b)(1)]
   b) For semi-annual Compliance Reports, the first Compliance Report shall be postmarked or delivered no later than July 31. [§63.6650(b)(2)]
c) For semi-annual Compliance Reports, each subsequent Compliance Report shall cover the semi-annual reporting period from January 1 through June 30 or the semi-annual reporting period from July 1 through December 31. [§63.6650(b)(3)]

d) For semi-annual Compliance Reports, each subsequent Compliance Report shall be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semi-annual reporting period. [§63.6650(b)(4)]

e) The permittee may submit the first and subsequent Compliance Reports as part of their 40 CFR Part 70 semi-annual Compliance Reports rather than on the above schedule. [§63.6650(b)(5)]

3. The Compliance Report shall contain the following information: [§63.6650(c)]

a) Company name and address. [§63.6650(c)(1)]

b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [§63.6650(c)(2)]

c) Date of report and beginning and ending dates of the reporting period. [§63.6650(c)(3)]

d) If a malfunction occurred during the reporting period, the Compliance Report shall 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 limit to be exceeded. The report shall also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction. [§63.6650(c)(4)]

e) If there are no deviations from any emission or operating limits that apply, a statement that there were no deviations from the emission or operating limits during the reporting period. [§63.6650(c)(5)]

f) 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. [§63.6650(c)(6)]

4. For each deviation from an emission or operating limit that occurs for a stationary RICE where the permittee is not using a CMS to comply with the emission or operating limits in this subpart, the Compliance Report shall contain the information in §63.6650(c)(1) through (4) and the following information: [§63.6650(d)]

a) The total operating time of the stationary RICE at which the deviation occurred during the reporting period. [§63.6650(d)(1)]

b) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [§63.6650(d)(2)]

5. For each deviation from an emission or operating limit occurring for a stationary RICE where the permittee is using a CMS to comply with the emission and operating limits in this subpart, the permittee shall include the information in §63.6650(c)(1) through (4) and the following information: [§63.6650(e)]

a) The date and time that each malfunction started and stopped. [§63.6650(e)(1)]

b) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks. [§63.6650(e)(2)]

c) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8). [§63.6650(e)(3)]

d) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period. [§63.6650(e)(4)]

e) 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. [§63.6650(e)(5)]
f) 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. [§63.6650(e)(6)]

g) 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. [§63.6650(e)(7)]

h) An identification of each parameter and pollutant (CO) that was monitored at the stationary RICE. [§63.6650(e)(8)]

i) A brief description of the stationary RICE. [§63.6650(e)(9)]

j) A brief description of the CMS. [§63.6650(e)(10)]

k) The date of the latest CMS certification or audit. [§63.6650(e)(11)]

l) A description of any changes in CMS, processes, or controls since the last reporting period. [§63.6650(e)(12)]

6. The permittee shall report all deviations as defined in this subpart in the semi-annual monitoring report required by 40 CFR 70.6(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 semi-annual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A), and the Compliance Report includes all required information concerning deviations from any emission or operating limit in this subpart, submission of the Compliance Report shall be deemed to satisfy any obligation to report the same deviations in the semi-annual 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. [§63.6650(f)]

7. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.

8. The permittee shall report any deviations from the standards, performance testing, monitoring, initial compliance, continuous compliance, notifications, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

Table 7 to Subpart ZZZZ of Part 63 — Requirements for Reports

<table>
<thead>
<tr>
<th>The Compliance Report shall contain…</th>
<th>The report shall be submitted…</th>
</tr>
</thead>
<tbody>
<tr>
<td>If there are no deviations from any emission limits or operating limits that apply, a statement that there were no deviations from the emission limits or operating limits during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or</td>
<td>Semi-annually according to the requirements in §63.6650(b)</td>
</tr>
<tr>
<td>If a deviation from any emission limit or operating limit occurred during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or</td>
<td></td>
</tr>
<tr>
<td>If a malfunction occurred during the reporting period, the information in §63.6650(c)(4)</td>
<td></td>
</tr>
</tbody>
</table>
### EP-11 Generator

<table>
<thead>
<tr>
<th>Description</th>
<th>Manufacturer/Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993 Fuel Oil #2/Natural Gas Fired, 54 MMBtu/hr, 6.3 MWe</td>
<td>Cooper Bessemer, LSVB-20-G.D.C.</td>
</tr>
</tbody>
</table>

### PERMIT CONDITION EP-11 - 001
10 CSR 10-6.060 Construction Permits Required
Construction Permit 0493-002, Issued April 6, 1993

**Emission Limitation:**
1. Special Condition 1: Best Available Control Technology (BACT) for the emissions of NO\textsubscript{x} from the operation of EP-11 Generator is set at 2.0 grams per brake horsepower hour at 100 percent load, three-hour average.
2. Special Condition 2: BACT for the emissions of CO shall be considered to be the optimization of engine efficiency by redesign, which has been incorporated in the engine under review. This is to result in an emission rate of CO of no more than 2.0 grams per brake horsepower hour at 100 percent load, three-hour average.
3. Special Condition 3: BACT for the emissions of VOCs shall be considered to be the optimization of engine efficiency by redesign, which has been incorporated in the engine under review. This is to result in an emission rate of VOCs of no more than 0.7 grams per brake horsepower hour at 100 percent load, three-hour average.
4. Special Condition 4: The emissions from the operation of EP-11 Generator shall not exceed 15 tons of PM\textsubscript{10} during any rolling 12-month period.
5. Special Condition 5: The emissions from the operation of EP-11 Generator shall not exceed 25 tons of total suspended particulate matter (TSP) during any rolling 12-month period.
6. Special Condition 6: The emissions from the operation of EP-11 Generator shall not exceed 40 tons of SO\textsubscript{x} during any rolling 12-month period.
7. Special Condition 7: The sulfur content of the fuel oil as fired shall not exceed 0.25932 percent by weight.

**Operational Limitations:**
1. Special Condition 13: SO\textsubscript{x} shall be measured by fuel analysis rather than by Method 6 or 6C. There being no SO\textsubscript{x} reduction in this engine, this method shall provide acceptable accuracy.
2. Special Condition 16: The permittee shall adhere to the requirements of 10 CSR 10-6.050 Start-Up, Shutdown, and Malfunction Conditions at all times that this engine is operated.
3. Special Condition 17: No fuels other than natural gas or fuel oil #2 shall be combusted in EP-11 Generator at any time. The as-fired fuel mix shall consist of 99 percent natural gas and one percent fuel oil #2, except during periods of startup or shutdown.

**Monitoring/Recordkeeping:**
1. Special Condition 15: The permittee shall monitor the sulfur content of the fuel oil fired in EP-11 Generator. The frequency of determination of these values shall be as follows:
   a) If the engine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
   b) If the engine is supplied fuel without intermediate bulk storage, the values shall be determined and recorded daily. Owners, operators, or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the
characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by both the Director of the Department of Natural Resources, and by the Administrator of the U.S. Environmental Protection Agency, before they can be used to comply with this condition.

Reporting:
1. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
2. The permittee shall report any deviations from the emission limitations, operational limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION EP-11 - 002
10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds

Emission Limitations:
1. The permittee shall not cause or permit the emission into the atmosphere of gases containing more than 500 ppmv of sulfur dioxide or more than 35 mg/m³ of sulfuric acid or sulfur trioxide or any combination of these gases averaged on any consecutive three-hour time period.
2. The permittee shall not cause or permit the emission of sulfur compounds from any source, which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Concentration by Volume</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfur Dioxide (SO₂)</td>
<td>0.5 ppm (1300 µg/m³)</td>
<td>3-hour average not to be exceeded more than once per year</td>
</tr>
<tr>
<td></td>
<td>75 ppb</td>
<td>1-hour average; 3-year average of the 99th percentile of the daily maximum 1-hour average at each site monitor within an area</td>
</tr>
<tr>
<td>Hydrogen Sulfide (H₂S)</td>
<td>0.05 ppm (70 µg/m³)</td>
<td>½-hour average not to be exceeded over 2 times per year</td>
</tr>
<tr>
<td></td>
<td>0.03 ppm (42 µg/m³)</td>
<td>½-hour average not to be exceeded over 2 times in any 5 consecutive days</td>
</tr>
<tr>
<td>Sulfuric Acid (H₂SO₄)</td>
<td>10 µg/m³</td>
<td>24-hour average not to be exceeded more than once in any 90 consecutive days</td>
</tr>
<tr>
<td></td>
<td>30 µg/m³</td>
<td>1-hour average not to be exceeded more than once in any 2 consecutive days</td>
</tr>
</tbody>
</table>

Monitoring/Recordkeeping:
1. The permittee shall monitor the sulfur content of each delivery of fuel documenting that the sulfur content never exceeds 0.25932 percent.
2. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
3. Records may be kept in either written or electronic form.
4. All records shall be maintained for five years.
Reporting:
1. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
2. The permittee shall report any deviations from the emission limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITIONS EP-11 - 003

1Existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions must comply with the applicable emission limitations and operating limitations no later than May 3, 2013 [§63.6595(a)(1)]

Standards:
1. The permittee shall comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart. [§63.6600(d)]
2. The permittee shall only use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. [§63.6604]
3. The permittee shall be in compliance with the emission limitations and operating limitations in this subpart that apply at all times. [§63.6605(a)]
4. At all times the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee 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. [§63.6605(b)]
5. If the RICE are not equipped with a closed crankcase ventilation system, the permittee shall comply with either §63.6625(g)(1) or (2). The permittee shall 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. [§63.6625(g)]
   a) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or [§63.6625(g)(1)]
   b) 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. [§63.6625(g)(2)]
6. The permittee shall 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 Table 2c to this subpart apply. [§63.6625(h)]
Table 2c to Subpart ZZZZ of Part 63 — Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP

<table>
<thead>
<tr>
<th>RICE Type</th>
<th>Emission Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Emergency, non-black start stationary CI RICE &gt;500 HP</td>
<td>Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15% O₂; or Reduce CO emissions by 70% or more</td>
</tr>
</tbody>
</table>

Table 2b to Subpart ZZZZ of Part 63 — Operating Limitations for Existing Compression Ignition Stationary RICE >500 HP

<table>
<thead>
<tr>
<th>Compliance Method</th>
<th>Operational Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst</td>
<td>Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2” of H₂O at 100% load ± 10% from the pressure drop across the catalyst that was measured during the initial performance test; and Maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1350°F¹</td>
</tr>
<tr>
<td>CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst</td>
<td>Comply with any operating limitations approved by the Administrator</td>
</tr>
</tbody>
</table>

¹Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(g) for a different temperature range.

Performance Testing:
1. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three one-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart. [§63.6600]
2. The permittee shall conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply within 180 days after May 3, 2013 and according to the provisions in §63.7(a)(2). [§63.6610(a)]
3. The permittee 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 following conditions: [§63.6610(d)]
   a) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly. [§63.6610(d)(1)]
   b) The test must not be older than two years. [§63.6610(d)(2)]
   c) The test must be reviewed and accepted by the Administrator. [§63.6610(d)(3)]
   d) Either no process or equipment changes must have been made since the test was performed, or the permittee must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes. [§63.6610(d)(4)]
   e) The test must be conducted at any load condition within ± ten percent of 100 percent load. [§63.6610(d)(5)]
4. The permittee shall conduct subsequent performance tests as specified in Table 3 of this subpart. [§63.6615]
5. The permittee shall conduct each performance test in Tables 3 and 4 of this subpart that applies. [§63.6620(a)]

6. Each performance test shall be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If the permittee owns or operates a non-operational stationary RICE that is subject to performance testing, the permittee does not need to start up the engine solely to conduct the performance test. The permittee may conduct the performance test when the engine is started up again. [§63.6620(b)]

7. The permittee shall conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run shall last at least one hour. [§63.6620(d)]

8. The permittee shall use Equation 1 of this section to determine compliance with the percent reduction requirement:

\[
\frac{C_i - C_o}{C_i} \times 100 = R \quad \text{Equation 1}
\]

Where:
- \(C_i\) = concentration of CO at the control device inlet,
- \(C_o\) = concentration of CO at the control device outlet, and
- \(R\) = percent reduction of CO emissions. [§63.6620(e)(1)]

9. The permittee shall normalize the CO concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent 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 the following paragraphs: [§63.6620(e)(2)]

\(\text{a) Calculate the fuel-specific } F_o \text{ value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:}
\]

\[
F_o = \frac{0.209 F_d}{F_c} \quad \text{Equation 2}
\]

Where:
- \(F_o\) = 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/10\(^6\) 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/10\(^6\) Btu). [§63.6620(e)(2)(i)]

\(\text{b) Calculate the CO\(_2\) correction factor for correcting measurement data to 15 percent oxygen, as follows:}
\]

\[
X_{CO_2} = \frac{5.9}{F_o} \quad \text{Equation 3}
\]

Where:
- \(X_{CO_2}\) = CO\(_2\) correction factor, percent.
- 5.9 = 20.9 percent O\(_2\)−15 percent O\(_2\), the defined O\(_2\) correction value, percent. [§63.6620(e)(2)(ii)]

\(\text{c) Calculate the NO\(_x\) and SO\(_2\) gas concentrations adjusted to 15 percent O\(_2\) using CO\(_2\) as follows:}
\]

\[
C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \quad \text{Equation 4}
\]
Where:

\[ \% \text{CO}_2 = \text{Measured CO}_2 \text{ concentration measured, dry basis, percent.}[\$63.6620(e)(2)(iii)] \]

10. If the permittee is complying with the emission limitation to reduce CO and is not using an oxidation catalyst, the permittee shall 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. The permittee shall not conduct the initial performance test until after the petition has been approved by the Administrator. [§63.6620(f)]

11. If the permittee petitions the Administrator for approval of operating limitations, the petition shall include the following information: [§63.6620(g)]

a) Identification of the specific parameters the permittee proposes to use as operating limitations; [§63.6620(g)(1)]

b) 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; [§63.6620(g)(2)]

c) A discussion of how the permittee will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations; [§63.6620(g)(3)]

d) A discussion identifying the methods the permittee will use to measure and the instruments the permittee will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and [§63.6620(g)(4)]

e) A discussion identifying the frequency and methods for recalibrating the instruments the permittee will use for monitoring these parameters. [§63.6620(g)(5)]

12. If the permittee petitions the Administrator for approval of no operating limitations, the petition shall include the following information: [§63.6620(h)]

a) 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; [§63.6620(h)(1)]

b) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions; [§63.6620(h)(2)]

c) 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; [§63.6620(h)(3)]

d) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how the permittee could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations; [§63.6620(h)(4)]

e) For the parameters, a discussion identifying the methods the permittee could use to measure them and the instruments the permittee could use to monitor them, as well as the relative accuracy and precision of the methods and instruments; [§63.6620(h)(5)]

f) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments the permittee could use to monitor them; and [§63.6620(h)(6)]

g) A discussion of why, from the permittee’s point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations. [§63.6620(h)(7)]

13. The engine percent load during a performance test shall 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 shall be included in the notification of compliance status. The following information shall 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 shall 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 shall be provided. [§63.6620(i)]

Table 4 to Subpart ZZZZ of Part 63 — Requirements for Performance Tests

<table>
<thead>
<tr>
<th>Emission Limit</th>
<th>Performance Test Requirement</th>
<th>Equipment/Method</th>
<th>Additional Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce CO emissions</td>
<td>Measure the O₂ at the inlet and outlet of the control device; and</td>
<td>Portable CO and O₂ analyzer</td>
<td>Using ASTM D6522–00 (2005)a (incorporated by reference, see §63.14). Measurements to determine O₂ shall be made at the same time as the measurements for CO conc.</td>
</tr>
<tr>
<td></td>
<td>Measure the CO at the inlet and the outlet of the control device</td>
<td></td>
<td>Using ASTM D6522–00 (2005)ab (incorporated by reference, see §63.14) or Method 10 of 40 CFR Appendix A. The CO concentration shall be at 15% O₂, dry basis</td>
</tr>
<tr>
<td>Limit the conc. of CO in the stationary RICE exhaust</td>
<td>Select the sampling port location and the number of traverse points; and</td>
<td>Method 1 or 1A of 40 CFR Part 60, Appendix A §63.7(d)(1)(i)</td>
<td>If using a control device, the sampling site shall be located at the outlet of the control device</td>
</tr>
<tr>
<td></td>
<td>Determine the O₂ conc. of the stationary RICE exhaust at the sampling port location; and</td>
<td>Method 3 or 3A or 3B of 40 CFR Part 60, Appendix A, or ASTM Method D6522–00 (2005)</td>
<td>Measurements to determine O₂ conc. shall be made at the same time and location as the measurements for CO conc.</td>
</tr>
<tr>
<td></td>
<td>Measure moisture content of the stationary RICE exhaust at the sampling port location; and</td>
<td>Method 4 of 40 CFR Part 60, Appendix A, or Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM D 6348–03</td>
<td>Measurements to determine moisture content shall be made at the same time and location as the measurements for CO conc.</td>
</tr>
<tr>
<td></td>
<td>Measure CO at the exhaust of the stationary RICE</td>
<td>Method 10 of 40 CFR Part 60, Appendix A, ASTM Method D6522–00 (2005),a Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348–03</td>
<td>CO conc. shall be at 15% O₂, dry basis. Results of this test consist of the average of the (3) 1-hour longer runs</td>
</tr>
</tbody>
</table>

aThe permittee may also use Methods 3A and 10 as options to ASTM–D6522–00 (2005). The permittee may obtain a copy of ASTM–D6522–00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTM–D6522–00 (2005) may be used to test both CI and SI stationary RICE.

bThe permittee may also use Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348–03.
Table 3 to Subpart ZZZZ of Part 63 — Subsequent Performance Tests

<table>
<thead>
<tr>
<th>RICE Type</th>
<th>Emission Limit</th>
<th>Subsequent Performance Testing Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing non-emergency, non-black start CI stationary RICE with a brake horsepower &gt;500 that are not limited use stationary RICE</td>
<td>Limit or reduce CO emissions</td>
<td>Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first</td>
</tr>
</tbody>
</table>

**Monitoring:**

1. If the permittee elects to install a CEMS as specified in Table 5 of this subpart, the permittee shall install, operate, and maintain a CEMS to monitor CO and either oxygen or CO₂ at both the inlet and the outlet of the control device according to the following requirements: [§63.6625(a)]
   a) Each CEMS shall be installed, operated, and maintained according to the applicable performance specifications of 40 CFR Part 60, Appendix B. [§63.6625(a)(1)]
   b) The permittee shall 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. [§63.6625(a)(2)]
   c) As specified in §63.8(c)(4)(ii), each CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. The permittee shall have at least two data points, with each representing a different 15-minute period, to have a valid hour of data. [§63.6625(a)(3)]
   d) The CEMS data shall be reduced as specified in §63.8(g)(2) and recorded in ppm or ppb as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO₂ concentration. [§63.6625(a)(4)]

2. If the permittee is required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, the permittee install, operate, and maintain each CPMS according to the following requirements: [§63.6625(b)]
   a) The permittee shall prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in §63.6625(b)(1)(i) through (v) and in §63.8(d). As specified in §63.8(f)(4), the permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in §63.6625(b)(1) through (5) in the site-specific monitoring plan. [§63.6625(b)(1)]
      i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations; [§63.6625(b)(1)(i)]
      ii) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements; [§63.6625(b)(1)(ii)]
      iii) Equipment performance evaluations, system accuracy audits, or other audit procedures; [§63.6625(b)(1)(iii)]
      iv) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1) and (c)(3); and [§63.6625(b)(1)(iv)]
      v) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i). [§63.6625(b)(1)(v)]
   b) The permittee shall install, operate, and maintain each CPMS in continuous operation according to the procedures in the site-specific monitoring plan. [§63.6625(b)(2)]
c) The CPMS shall collect data at least once every 15 minutes (see also §63.6635).
    [§63.6625(b)(3)]

d) For a CPMS for measuring temperature range, the temperature sensor shall have a minimum
tolerance of 2.8°C (5°F) or one percent of the measurement range, whichever is larger.
    [§63.6625(b)(4)]

e) The permittee shall conduct the CPMS equipment performance evaluation, system accuracy
audits, or other audit procedures specified in the site-specific monitoring plan at least annually.
    [§63.6625(b)(5)]

f) The permittee shall conduct a performance evaluation of each CPMS in accordance with the site-
specific monitoring plan. [§63.6625(b)(6)]

3. The permittee shall monitor and collect data according to this section. [§63.6635(a)]

4. Except for monitor malfunctions, associated repairs, required performance evaluations, and required
quality assurance or control activities, the permittee shall 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. [§63.6635(b)]

5. The permittee 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. The permittee shall, however, use all the valid data collected during all
other periods. [§63.6635(c)]
Table 5 to Subpart ZZZZ of Part 63 — Initial Compliance With Emission Limits and Operating Limits

<table>
<thead>
<tr>
<th>Compliance Method</th>
<th>The permittee has demonstrated initial compliance if…</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reduce CO emissions and using oxidation catalyst, and using a CPMS</strong></td>
<td>The avg. reduction of emissions of CO determined from the initial performance test achieves the required CO % reduction; and The permittee installed a CPMS to continuously monitor catalyst inlet temp. according to the requirements in §63.6625(b); and The permittee recorded the catalyst pressure drop and catalyst inlet temp. during the initial performance test.</td>
</tr>
<tr>
<td><strong>Limit the conc. of CO, using oxidation catalyst, and using a CPMS</strong></td>
<td>The avg. CO conc. determined from the initial performance test is ≤ the CO emission limitation; and The permittee installed a CPMS to continuously monitor catalyst inlet temp. according to the requirements in §63.6625(b); and The permittee recorded the catalyst pressure drop and catalyst inlet temp. during the initial performance test.</td>
</tr>
<tr>
<td><strong>Reduce CO emissions and not using oxidation catalyst</strong></td>
<td>The avg. reduction of emissions of CO determined from the initial performance test achieves the required CO % reduction; and The permittee installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and The permittee recorded the approved operating parameters (if any) during the initial performance test.</td>
</tr>
<tr>
<td><strong>Limit the conc. of CO, and not using oxidation catalyst</strong></td>
<td>The avg. CO conc. determined from the initial performance test is ≤ the CO emission limitation; and The permittee installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and The permittee recorded the approved operating parameters (if any) during the initial performance test.</td>
</tr>
<tr>
<td><strong>Reduce CO emissions, and using a CEMS</strong></td>
<td>The permittee installed a CEMS to continuously monitor CO and either O₂ or CO₂ at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and The permittee conducted a performance evaluation of the CEMS using PS 3 and 4A of 40 CFR Part 60, Appendix B; and The avg. reduction of CO calculated using §63.6620 is ≥ the required % reduction. The initial test comprises the 1st 4-hour period after successful validation of the CEMS. Compliance is based on the avg. % reduction achieved during the 4-hour period.</td>
</tr>
<tr>
<td><strong>Limit the conc of CO, and using a CEMS</strong></td>
<td>The permittee installed a CEMS to continuously monitor CO and either O₂ or CO₂ at the outlet of the oxidation catalyst according to the requirements in §63.6625(a); and The permittee conducted a performance evaluation of the CEMS using PS 3 and 4A of 40 CFR Part 60, Appendix B; and The avg. conc. of CO calculated using §63.6620 is ≤ the CO emission limitation. The initial test comprises the 1st 4-hour period after successful validation of the CEMS. Compliance is based on the avg. conc. measured during the 4-hour period.</td>
</tr>
</tbody>
</table>

Initial Compliance:
1. The permittee shall demonstrate initial compliance with each emission and operating limitation that applies according to Table 5 of this subpart. [§63.6630(a)]
2. During the initial performance test, the permittee shall establish each operating limitation in Table 2b of this subpart that applies. [§63.6630(b)]
3. The permittee shall submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645. [§63.6630(c)]
Continuous Compliance:
1. The permittee shall demonstrate continuous compliance with each emission limitation and operating limitation in Tables 2b and 2c to this subpart that apply according to methods specified in Table 6 to this subpart. [§63.6640(a)]
2. The permittee shall report each instance in which the permittee did not meet each emission limitation or operating limitation in Tables 2b and 2c to this subpart that apply. These instances are deviations from the emission and operating limitations in this subpart. These deviations shall be reported according to the requirements in §63.6650. If the permittee changes catalysts, the permittee shall reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee shall also conduct a performance test to demonstrate that the permittee is meeting the required emission limitation applicable to the stationary RICE. [§63.6640(b)]
3. The permittee shall also report each instance in which the permittee did not meet the requirements in subpart A to this part that apply. [§63.6640(e)]

Table 6 to Subpart ZZZZ of Part 63 — Continuous Compliance With Emission Limits, Operating Limits, Work Practices, and Management Practices

<table>
<thead>
<tr>
<th>Compliance Method</th>
<th>The permittee shall demonstrate continuous compliance by…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce CO emissions or limit the conc. of CO in the stationary RICE exhaust, and using oxidation catalyst or NSCR</td>
<td>Conducting performance tests every 8,760 hrs or 3 yrs, whichever comes 1st, for CO to demonstrate that the required CO % reduction is achieved or that the emissions remain at or below the CO conc. limit; and Collecting the catalyst inlet temp. data according to §63.6625(b); and Reducing these data to 4-hr rolling averages; and Maintaining the 4-hr rolling averages within the operating limits for the catalyst inlet temp.; and Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limit established during the performance test.</td>
</tr>
<tr>
<td>Reduce CO emissions or limit the conc. of CO in the stationary RICE exhaust, and not using oxidation catalyst or NSCR</td>
<td>Conducting performance tests every 8,760 hrs or 3 yrs, whichever comes 1st, for CO to demonstrate that the required CO % reduction is achieved or that the emissions remain at or below the CO conc. limit; and Collecting the approved operating parameter (if any) data according to §63.6625(b); and Reducing these data to 4-hr rolling averages; and Maintaining the 4-hr rolling averages within the operating limits for the operating parameters established during the performance test.</td>
</tr>
</tbody>
</table>

Notifications:
1. The permittee shall 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 by the dates specified.[§63.6645(a)]
2. The permittee shall 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). [§63.6645(g)]
3. The permittee shall submit a Notification of Compliance Status according to §63.9(h)(2)(ii). [§63.6645(h)]
   a) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, the permittee shall submit the Notification of Compliance Status
before the close of business on the 30th day following the completion of the initial compliance demonstration. [§63.6645(h)(1)]

b) 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, the permittee shall 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). [§63.6645(h)(2)]

Recordkeeping:
1. The permittee shall retain the records described in §63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (e). [§63.6655(a)]
   a) A copy of each notification and report that the permittee submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted, according to the requirement in §63.10(b)(2)(xiv). [§63.6655(a)(1)]
   b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [§63.6655(a)(2)]
   c) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii). [§63.6655(a)(3)]
   d) Records of all required maintenance performed on the air pollution control and monitoring equipment. [§63.6655(a)(4)]
   e) 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. [§63.6655(a)(5)]

2. For each CEMS or CPMS, the permittee shall retain the following records: [§63.6655(b)]
   a) Records described in §63.10(b)(2)(vi) through (xi). [§63.6655(b)(1)]
   b) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3). [§63.6655(b)(2)]
   c) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable. [§63.6655(b)(3)]

3. The permittee shall retain the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limit that applies. [§63.6655(d)]

4. The permittee shall retain each record readily accessible in hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). [§63.6660(c)]

5. These records shall be kept on-site, and shall be made available to Department personnel upon request.

Reporting:
1. The permittee shall submit each report in Table 7 of this subpart that applies. [§63.6650(a)]

2. Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), the permittee shall submit each report by the date in Table 7 of this subpart and according to the following requirements: [§63.6650(b)]
   a) For semi-annual Compliance Reports, the first Compliance Report shall cover the period beginning May 3, 2013 and ending on June 30. [§63.6650(b)(1)]
b) For semi-annual Compliance Reports, the first Compliance Report shall be postmarked or delivered no later than July 31. [§63.6650(b)(2)]

c) For semi-annual Compliance Reports, each subsequent Compliance Report shall cover the semi-annual reporting period from January 1 through June 30 or the semi-annual reporting period from July 1 through December 31. [§63.6650(b)(3)]

d) For semi-annual Compliance Reports, each subsequent Compliance Report shall be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semi-annual reporting period. [§63.6650(b)(4)]

e) The permittee may submit the first and subsequent Compliance Reports as part of their 40 CFR Part 70 semi-annual Compliance Reports rather than on the above schedule. [§63.6650(b)(5)]

3. The Compliance Report shall contain the following information: [§63.6650(c)]

   a) Company name and address. [§63.6650(c)(1)]
   b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [§63.6650(c)(2)]
   c) Date of report and beginning and ending dates of the reporting period. [§63.6650(c)(3)]
   d) If a malfunction occurred during the reporting period, the Compliance Report shall 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 limit to be exceeded. The report shall also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction. [§63.6650(c)(4)]
   e) If there are no deviations from any emission or operating limits that apply, a statement that there were no deviations from the emission or operating limits during the reporting period. [§63.6650(c)(5)]
   f) 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. [§63.6650(c)(6)]

4. For each deviation from an emission or operating limit that occurs for a stationary RICE where the permittee is not using a CMS to comply with the emission or operating limits in this subpart, the Compliance Report shall contain the information in §63.6650(c)(1) through (4) and the following information: [§63.6650(d)]

   a) The total operating time of the stationary RICE at which the deviation occurred during the reporting period. [§63.6650(d)(1)]
   b) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [§63.6650(d)(2)]

5. For each deviation from an emission or operating limit occurring for a stationary RICE where the permittee is using a CMS to comply with the emission and operating limits in this subpart, the permittee shall include the information in §63.6650(c)(1) through (4) and the following information: [§63.6650(e)]

   a) The date and time that each malfunction started and stopped. [§63.6650(e)(1)]
   b) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks. [§63.6650(e)(2)]
   c) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8). [§63.6650(e)(3)]
   d) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period. [§63.6650(e)(4)]
e) 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.
§63.6650(e)(5)

f) 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. §63.6650(e)(6)

g) 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. §63.6650(e)(7)

h) An identification of each parameter and pollutant (CO) that was monitored at the stationary
RICE. §63.6650(e)(8)

i) A brief description of the stationary RICE. §63.6650(e)(9)

j) A brief description of the CMS. §63.6650(e)(10)

k) The date of the latest CMS certification or audit. §63.6650(e)(11)

l) A description of any changes in CMS, processes, or controls since the last reporting period.
§63.6650(e)(12)

6. The permittee shall report all deviations as defined in this subpart in the semi-annual monitoring
report required by 40 CFR 70.6(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 semi-annual monitoring report
required by 40 CFR 70.6(a)(3)(iii)(A), and the Compliance Report includes all required information
concerning deviations from any emission or operating limit in this subpart, submission of the
Compliance Report shall be deemed to satisfy any obligation to report the same deviations in the
semi-annual 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. §63.6650(f)

7. The permittee shall report to the Air Pollution Control Program’s Enforcement Section,
P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the
terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of
this regulation.

8. The permittee shall report any deviations from the standards, performance testing, monitoring, initial
compliance, continuous compliance, notifications, recordkeeping, and reporting requirements of this
permit condition in the semi-annual monitoring report and compliance certification required by
Section V of this permit.

Table 7 to Subpart ZZZZ of Part 63 — Requirements for Reports

<table>
<thead>
<tr>
<th>The Compliance Report shall contain…</th>
<th>The report shall be submitted…</th>
</tr>
</thead>
<tbody>
<tr>
<td>If there are no deviations from any emission limits or operating limits that apply, a statement that there were no deviations from the emission limits or operating limits during the reporting period. If there were no periods during which the 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; or</td>
<td>Semi-annually according to the requirements in §63.6650(b)</td>
</tr>
<tr>
<td>If a deviation from any emission limit or operating limit occurred during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(c); or</td>
<td></td>
</tr>
<tr>
<td>If a malfunction occurred during the reporting period, the information in §63.6650(e)(4)</td>
<td></td>
</tr>
</tbody>
</table>
EP-18 Boiler

<table>
<thead>
<tr>
<th>Description</th>
<th>Manufacturer/Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003 RDF/Fuel Oil #2/Natural Gas Fired, 5.25 MMBtu/hr</td>
<td>Hurst Boiler &amp; Welding Co., 0200624</td>
</tr>
</tbody>
</table>

PERMIT CONDITION EP-18 - 001
10 CSR 10-6.060 Construction Permits Required
Construction Permit 092002-007, Issued August 5, 2002

Operational Limitation:
1. Special Condition 2.A: All paper pellet fuel combusted in EP-18 Boiler shall have a sulfur content of 0.15 percent by weight or less.
2. Special Condition 3.A: The permittee shall not combust more than 42 gallons of distillate fuel oil #2 in EP-18 Boiler in any consecutive 12 month period.

Monitoring/Recordkeeping
1. Special Condition 2.B: At least once every year, after commencement of operation, the permittee shall obtain from the fuel vendor or conduct their own fuel analysis to evaluate the typical sulfur content weight percent for paper pellets. The fuel consumption records and statement shall be kept on-site for five years and shall be made immediately available to the Missouri Department of Natural Resources’ personnel upon request.
2. Special Condition 3.B: Attachment H or an equivalent form generated by the permittee shall be used to document the amount of distillate fuel oil #2 combusted during each consecutive 12 month period. The permittee shall retain all records for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources’ personnel upon request.
3. Records may be kept in either written or electronic form.

Reporting:
1. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
2. The permittee shall report any deviations from the emission limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION EP-18 - 002
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Limitation:
1. The permittee shall not cause or allow emissions to be discharged into the atmosphere from any new source any visible emissions with opacity greater than 20 percent.
2. Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six minutes in any 60 minutes air contaminants with opacity up to 60 percent.
Monitoring:
1. The permittee shall conduct opacity readings on this emission source using the procedures contained in U.S. EPA Test Method 22. Readings are only required when the emission source is operating and when the weather conditions allow. If no visible emissions are observed using these procedures, then no further observations are required. If visible emissions are observed, then the source representative shall conduct a Method 9 observation.
2. The following monitoring schedule shall be maintained:
   a) Eight weekly observations shall be conducted after permit issuance. Should no violation of this regulation be observed during this period then
   b) Four observations shall be conducted once every two weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then
   c) Observations shall be conducted once per month. If a violation is noted, monitoring reverts to weekly.
   d) If, at the issuance of this permit, the permittee has progressed in the monitoring schedule listed above, the permittee may continue to advance accordingly.
3. If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

Recordkeeping:
1. The permittee shall maintain records of all Method 22 observation results using Attachment C, or an equivalent form generated by the permittee, noting whether any air emissions (except for water vapor) were visible from the emission sources.
2. The permittee shall maintain records of all Method 9 observation results using Attachment D, or an equivalent form generated by the permittee, noting whether the visible emissions (except for water vapor) exceeded the opacity limit.
3. The permittee shall maintain records of any equipment malfunctions using Attachment A or an equivalent form generated by the permittee.
4. Records may be kept in either written or electronic form.
5. These records shall be made available immediately for inspection to Department of Natural Resources’ personnel upon request.
6. All records shall be maintained for five years.

Reporting:
1. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
2. The permittee shall report any deviations from the emission limitations, monitoring, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.
PERMIT CONDITION EP-18 - 003
10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds

The permittee is exempt from the requirements of this permit condition while combusting exclusively pipeline grade natural gas per 10 CSR 10-6.260(1)(A).

Emission Limitations:
1. The permittee shall not cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight pounds of sulfur dioxide per million BTUs actual heat input averaged on any consecutive three hour time period.
2. No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Concentration by Volume</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfur Dioxide (SO₂)</td>
<td>0.5 ppm (1300 µg/m³)</td>
<td>3-hour average not to be exceeded more than once per year</td>
</tr>
<tr>
<td></td>
<td>75 ppb</td>
<td>1-hour average; 3-year average of the 99th percentile of the daily maximum 1-hour average at each site monitor within an area</td>
</tr>
<tr>
<td>Hydrogen Sulfide (H₂S)</td>
<td>0.05 ppm (70 µg/m³)</td>
<td>½-hour average not to be exceeded over 2 times per year</td>
</tr>
<tr>
<td></td>
<td>0.03 ppm (42 µg/m³)</td>
<td>½-hour average not to be exceeded over 2 times in any 5 consecutive days</td>
</tr>
<tr>
<td>Sulfuric Acid (H₂SO₄)</td>
<td>10 µg/m³</td>
<td>24-hour average not to be exceeded more than once in any 90 consecutive days</td>
</tr>
<tr>
<td></td>
<td>30 µg/m³</td>
<td>1-hour average not to be exceeded more than once in any 2 consecutive days</td>
</tr>
</tbody>
</table>

This requirement is not federally enforceable. This requirement can only be directly enforced by the State of Missouri.

Recordkeeping:
1. The permittee shall retain Attachment J which contains calculations demonstrating that the permittee is in compliance with this regulation while combusting the specified fuel.
2. Records may be kept in either written or electronic form.
3. These records shall be made available immediately for inspection to Department of Natural Resources’ personnel upon request.
4. All records shall be maintained for five years.

Reporting:
1. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
2. The permittee shall report any deviations from the emission limitations, monitoring, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.
PERMIT CONDITION EP-18 - 004
10 CSR 10-6.405 Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used For Indirect Heating

**Emission Limitation:**
The permittee shall not emit particulate matter in excess of 0.19 pounds per million BTU of heat input.

**Operational Limitation:**
1. The permittee shall control emissions from EP-18 using a multiclone. The multiclone shall be operated and maintained in accordance with manufacturer’s specifications. The multiclone shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. The gauge or meter shall be located such that the Department of Natural Resources’ employees may easily observe them.
2. The multiclone shall be operated such that the pressure drop across the control device is greater than or equal to 0.75 inches of water column.

**Monitoring/Recordkeeping:**
1. The permittee shall monitor and record the operating pressure drop across the multiclone at least once each operating day while the unit is operating. The operating pressure drop range will be specified based on normal operation and manufacturer’s recommendations.
2. The permittee shall maintain an operating and maintenance log for the control device using Attachment A or an equivalent form generated by the permittee. The record shall be maintained in hard copy or electronic form. The log(s) shall include the following:
   a) Incidents of malfunction, with impact on emissions, duration of the event, probable cause of the event, and corrective actions; and
   b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
3. The permittee shall retain a copy of the manufacturer’s specifications.
4. Attachment B contains calculations documenting that the permittee is in compliance with the emission limit while the multiclone is being properly maintained and operated.
5. Records may be kept in either written or electronic form.
6. These records shall be made available immediately for inspection to Department of Natural Resources’ personnel upon request.
7. All records shall be maintained for five years.

**Reporting:**
1. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
2. The permittee shall report any deviations from the emission limitation, operational limitation, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.
IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The following is only an excerpt from the regulation or code, and is provided for summary purposes only.

10 CSR 10-6.045 Open Burning Requirements

1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.

2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
   a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises.
   b) Yard waste.

3) Certain types of materials may be open burned provided an open burning permit is obtained from the Director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.

4) Marshall Municipal Utilities Power Plant may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least two hundred (200) yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if Marshall Municipal Utilities Power Plant fails to comply with the provisions or any condition of the open burning permit.
   a) In a nonattainment area, as defined in 10 CSR 10-6.020, Paragraph (2)(N)5., the Director shall not issue a permit under this section unless the owner or operator can demonstrate to the satisfaction of the Director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.

5) Reporting and Recordkeeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in 40 CFR 60.2245-60.2260. The provisions of 40 CFR Part 60 Subpart CCCC promulgated as of September 22, 2005, shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with NSPS 40 CFR 60.2245-60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the Director.

promulgated as of December 23, 1971, is incorporated by reference in this rule, as published by the

**10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions**

1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee
shall submit to the Director within two business days, in writing, the following information:
   a) Name and location of installation;
   b) Name and telephone number of person responsible for the installation;
   c) Name of the person who first discovered the malfunction and precise time and date that the
      malfunction was discovered.
   d) Identity of the equipment causing the excess emissions;
   e) Time and duration of the period of excess emissions;
   f) Cause of the excess emissions;
   g) Air pollutants involved;
   h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable
      requirement and the operating data and calculations used in estimating the magnitude;
   i) Measures taken to mitigate the extent and duration of the excess emissions; and
   j) Measures taken to remedy the situation that caused the excess emissions and the measures taken
      or planned to prevent the recurrence of these situations.

2) The permittee shall submit the Paragraph 1 information list to the Director in writing at least ten
   days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release
   of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the
   planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned
   excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown,
   the Director shall be notified verbally as soon as practical during normal working hours and no later
   than the close of business of the following working day. A written notice shall follow within ten
   working days.

3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority
   under Section 643.140, RSMo, the permittee may provide information showing that the excess
   emissions were the consequence of a malfunction, start-up or shutdown. The information, at a
   minimum, should be the Paragraph 1 list and shall be submitted not later than 15 days after receipt of
   the notice of excess emissions. Based upon information submitted by the permittee or any other
   pertinent information available, the Director or the commission shall make a determination whether
   the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent
   and duration of the excess emissions warrant enforcement action under Section 643.080 or 643.151,
   RSMo.

4) Nothing in this rule shall be construed to limit the authority of the Director or commission to take
   appropriate action, under Sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of
   the Air Conservation Law and the corresponding rule.

5) Compliance with this rule does not automatically absolve the permittee of liability for the excess
   emissions reported.

**10 CSR 10-6.060 Construction Permits Required**

The permittee shall not commence construction, modification, or major modification of any installation
subject to this rule, begin operation after that construction, modification, or major modification, or begin
operation of any installation which has been shut down longer than five years without first obtaining a
permit from the permitting authority.
10 CSR 10-6.065 Operating Permits
The permittee shall file a complete application for renewal of this operating permit at least six months
before the date of permit expiration. In no event shall this time be greater than eighteen months. [10
CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this
installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit
available to any Missouri Department of Natural Resources’ personnel upon request. [10 CSR 10-
6.065(6)(C)3.B]

10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61
Subpart M National Emission Standard for Asbestos
1) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any
activities occurring at this installation which would be subject to provisions for 40 CFR Part 61,
Subpart M, National Emission Standard for Asbestos.
2) The permittee shall conduct monitoring to demonstrate compliance with registration, certification,
notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61,
Subpart M.

10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information
1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance
with the requirements outlined in this rule.
2) The permittee may be required by the Director to file additional reports.
3) Public Availability of Emission Data and Process Information. Any information obtained pursuant
to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential
treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
4) The permittee shall submit a full paper EIQ to the Air Pollution Control Program by no later than
April 1st after the end of each reporting year. The permittee may instead submit a full electronic EIQ
via MoEIS by no later than May 1st after the end of each reporting year.
5) Emission fees are due by no later than June 1st after the end of each reporting year. The fees shall be
payable to the Missouri Department of Natural Resources.
6) The reporting period shall end on December 31 of each calendar year. Each report shall contain the
required information for each emission unit for the twelve (12)-month period immediately preceding
the end of the reporting period.
7) The permittee shall collect, record and maintain the information necessary to complete the required
forms during each year of operation of the installation.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential
This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or
emergency (maroon) and the associated procedures and emission reduction objectives for dealing with
each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention
The permittee shall not cause or permit the installation or use of any device or any other means which,
without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an
emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.
10 CSR 10-6.170
Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

**Emission Limitation:**
1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the Director.

2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.

3) Should it be determined that noncompliance has occurred, the Director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
   a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
   b) Paving or frequent cleaning of roads, driveways and parking lots;
   c) Application of dust-free surfaces;
   d) Application of water; and
   e) Planting and maintenance of vegetative ground cover.

**Monitoring:**
1. The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.

2. The permittee shall conduct monthly observations unless a violation is noted, which will require the following monitoring schedule:
   a) The permittee shall conduct weekly observations for a minimum of eight consecutive weeks after the violation.
   b) Should no violation of this regulation be observed during this period then-
      i) The permittee may observe once every two weeks for a period of eight weeks.
      ii) If a violation is noted, monitoring reverts to weekly.
      iii) Should no violation of this regulation be observed during this period then-
         (1) The permittee may observe once per month.
         (2) If a violation is noted, monitoring reverts to weekly.
   c) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

**Recordkeeping:**
1. The permittee shall document all readings on Attachment I, or its equivalent, noting the following:
   a) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
   b) Whether equipment malfunctions contributed to an exceedance.
   c) Any violations and any corrective actions undertaken to correct the violation.
10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

1) The Director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The Director may specify testing methods to be used in accordance with good professional practice. The Director may observe the testing. All tests shall be performed by qualified personnel.

2) The Director may conduct tests of emissions of air contaminants from any source. Upon request of the Director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.

3) The Director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-6.165 Restriction of Emission of Odors

This requirement is not federally enforceable.

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the Department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the Department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the Department. Certain business entities that meet the requirements for state-approved exemption status must allow the Department to monitor training classes provided to employees who perform asbestos abatement.

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
   a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
   b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
   c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.

2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
   a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
   b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
   c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
   d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
   e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
   f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.

4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. Federal Only - 40 CFR Part 82

10 CSR 10-6.280 Compliance Monitoring Usage

1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
   a) Monitoring methods outlined in 40 CFR Part 64;
   b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, “Operating Permits”, and incorporated into an operating permit; and
   c) Any other monitoring methods approved by the Director.

2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
   a) Monitoring methods outlined in 40 CFR Part 64;
   b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, “Operating Permits”, and incorporated into an operating permit; and
c) Compliance test methods specified in the rule cited as the authority for the emission limitations.

3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
   a) Applicable monitoring or testing methods, cited in:
      i) 10 CSR 10-6.030, “Sampling Methods for Air Pollution Sources”;
      ii) 10 CSR 10-6.040, “Reference Methods”;
      iii) 10 CSR 10-6.070, “New Source Performance Standards”;
      iv) 10 CSR 10-6.080, “Emission Standards for Hazardous Air Pollutants”; or
   b) Other testing, monitoring, or information gathering methods, if approved by the Director, that produce information comparable to that produced by any method listed above.
V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

10 CSR 10-6.065(6)(C)1.B Permit Duration
This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

10 CSR 10-6.065(6)(C)1.C General Recordkeeping and Reporting Requirements
1) Recordkeeping
   a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
   b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources’ personnel upon request.
2) Reporting
   a) All reports shall be submitted to the Air Pollution Control Program’s Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
   b) The permittee shall submit a report of all required monitoring by:
      i) October 1st for monitoring which covers the January through June time period, and
      ii) April 1st for monitoring which covers the July through December time period.
      iii) Exception. Monitoring requirements which require reporting more frequently than semi-annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
   c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
   d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
      i) Notice of any deviation resulting from an emergency (or upset) condition as defined in Paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semi-annual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.

e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.

f) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:
1) June 21, 1999;
2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
3) The date on which a regulated substance is first present above a threshold quantity in a process.

10 CSR 10-6.065(6)(C)1.F Severability Clause

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

10 CSR 10-6.065(6)(C)1.G General Requirements

1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.

2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.

5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to
the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

**10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions**

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

**10 CSR 10-6.065(6)(C)1.1 Reasonably Anticipated Operating Scenarios**

None.

**10 CSR 10-6.065(6)(C)3 Compliance Requirements**

1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.

2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation’s right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):

   a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;

   b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

   c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and

   d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.

3) All progress reports required under an applicable schedule of compliance shall be submitted semi-annually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:

   a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and

   b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.

4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, as well as the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:

   a) The identification of each term or condition of the permit that is the basis of the certification;

   b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
c) Whether compliance was continuous or intermittent;
d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065(6)(C)6 Permit Shield

1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
   a) The application requirements are included and specifically identified in this permit, or
   b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.

2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
   a) The provisions of Section 303 of the Act or Section 643.090, RSMo concerning emergency orders,
   b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
   c) The applicable requirements of the acid rain program,
   d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
   e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

10 CSR 10-6.065(6)(C)7 Emergency Provisions

1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7 shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
   a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
   b) That the installation was being operated properly,
   c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
   d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.

2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(6)(C)8 Operational Flexibility

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable
under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

1) Section 502(b)(10) changes. Changes that, under Section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting or compliance requirements of the permit.

a) Before making a change under this provision, the permittee shall provide advance written notice to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the Air Pollution Control Program as soon as possible after learning of the need to make the change.

b) The permit shield shall not apply to these changes.

10 CSR 10-6.065(6)(C)9 Off-Permit Changes

1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:

a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;

b) The permittee must provide written notice of the change to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.

c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
d) The permit shield shall not apply to these changes.

**10 CSR 10-6.020(2)(R)12 Responsible Official**

The application utilized in the preparation of this permit was signed by Paul E. Jensen. On February 13, 2009, the Air Pollution Control Program was informed that Kyle D. Gibbs, General Manager is now the responsible official. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

**10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause**

This permit may be reopened for cause if:

1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,

2) The Missouri Department of Natural Resources or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,

3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
   a) The permit has a remaining term of less than three years;
   b) The effective date of the requirement is later than the date on which the permit is due to expire;
   or
   c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,

4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit;

5) The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

**10 CSR 10-6.065(6)(E)1.C Statement of Basis**

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.
VI. Attachments

Attachments follow.
### Attachment A
Inspection/Maintenance/Repair/Malfunction Log

Emission Unit # or CVM # ________________________________

<table>
<thead>
<tr>
<th>Date/Time</th>
<th>Inspection/Maintenance Activities</th>
<th>Malfunction Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Malfunction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Attachment B
10 CSR 10-6.405 Compliance Demonstration

This attachment may be used to demonstrate that the listed emission units are in compliance with 10 CSR 10-6.405, Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used For Indirect Heating. Installation's Total Heat Input (Q) in MMBtu/hr:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Scenario 1 Heat Input (^1) (MMBtu/hr)</th>
<th>Scenario 2 Heat Input (^1) (MMBtu/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-03</td>
<td>Boiler Unit 3</td>
<td>74</td>
<td>74</td>
</tr>
<tr>
<td>EP-04</td>
<td>Boiler Unit 4</td>
<td>108</td>
<td>Not in use</td>
</tr>
<tr>
<td>EP-05</td>
<td>Boiler Unit 5</td>
<td>235</td>
<td>235</td>
</tr>
<tr>
<td>EP-17</td>
<td>WTP Space Heater</td>
<td>0.628</td>
<td>0.628</td>
</tr>
<tr>
<td>EP-18</td>
<td>Boiler</td>
<td>Not in use</td>
<td>5.25</td>
</tr>
<tr>
<td>Scenario 1 Total Q</td>
<td></td>
<td>417.63</td>
<td>314.88</td>
</tr>
</tbody>
</table>

\(^1\)EP-04 Boiler Unit 4 and EP-18 Boiler share a feedstream; therefore, only one of the boilers may be operated at any given time. As Scenario 1 has a larger Q, the emission limit calculated from its Q applies to EP-03, EP-04, EP-05, and EP-17. The emission limit calculated from Scenario 2 only applies to EP-18.

**Scenario 1 Limits:**

The allowable PM emission limit for existing indirect heating source at an installation located in outstate Missouri having a total heat input between 10 MMBtu/hr and 10,000 MMBtu/hr is determined by the following equation: [10 CSR 10-6.405(3)(D)]

\[ E = 0.90(Q)^{0.174} = 0.90(417.63)^{0.174} = 0.31 \]

The allowable PM emission limit for new indirect heating source at an installation located in outstate Missouri having a total heat input between 10 MMBtu/hr and 2,000 MMBtu/hr is determined by the following equation: [10 CSR 10-6.405(3)(E)]

\[ E = 1.31(Q)^{0.338} = 1.31(417.63)^{0.338} = 0.17 \]

**Scenario 2 Limit:**

The allowable PM emission limit for new indirect heating source at an installation located in outstate Missouri having a total heat input between 10 MMBtu/hr and 2,000 MMBtu/hr is determined by the following equation: [10 CSR 10-6.405(3)(E)]

\[ E = 1.31(Q)^{0.338} = 1.31(314.88)^{0.338} = 0.19 \]
### Uncontrolled Calculations

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-04</td>
<td>Bituminous Coal(^2)</td>
<td>13.2 lb/ton</td>
<td>FIRE SCC 10100204</td>
<td>0.51</td>
<td>0.31</td>
<td>225.00</td>
</tr>
<tr>
<td></td>
<td>Natural Gas(^1)</td>
<td>1.9 lb/MMscf</td>
<td>FIRE SCC 10100601</td>
<td>0.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Refuse-Derived Fuel(^3)</td>
<td>44 lb/ton</td>
<td>FIRE SCC 10301202</td>
<td>2.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-05</td>
<td>Bituminous Coal(^2)</td>
<td>2.3A lb/ton</td>
<td>AP-42 SCC 10100202</td>
<td>0.78</td>
<td>0.31</td>
<td>966.30</td>
</tr>
<tr>
<td></td>
<td>Natural Gas(^1)</td>
<td>1.9 lb/MMscf</td>
<td>FIRE SCC 10100601</td>
<td>0.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-17</td>
<td>Fuel Oil No. 2(^4)</td>
<td>2.46 lb/1000 gallons</td>
<td>FIRE SCC 10500105</td>
<td>0.02</td>
<td>0.17</td>
<td>0.05</td>
</tr>
<tr>
<td>EP-18</td>
<td>Natural Gas(^1)</td>
<td>1.9 lb/MMscf</td>
<td>FIRE SCC 10100601</td>
<td>0.002</td>
<td></td>
<td>83.21</td>
</tr>
<tr>
<td></td>
<td>Refuse-Derived Fuel(^3)</td>
<td>44 lb/ton</td>
<td>FIRE SCC 10301202</td>
<td>2.59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Natural gas was assumed to have an average heating value of 1,050 Btu/scf.

\(^2\)Bituminous coal was assumed to have an average heating value of 13,000 Btu/lb.

\(^3\)Refuse-derived fuel was assumed to have an average heating value of 8,500 Btu/lb.

\(^4\)Fuel Oil #2 was assumed to have an average heating value of 140,000 Btu/gallon.

EP-17 WTP Space Heater while burning the specified fuel, being properly maintained, and properly operated is in compliance with the regulation without the aid of a control device; therefore, 40 CFR Part 64 Compliance Assurance Monitoring is not applicable.

EP-18 Boiler is not in compliance with this regulation while combusting refuse-derived fuel without the aid of a control device, but potential particulate emissions are below the 100 tons per year major source threshold; therefore, 40 CFR Part 64 Compliance Assurance Monitoring is not applicable.

EP-04 Boiler Unit 4 and EP-05 Boiler Unit 5 are not in compliance with this regulation while combusting coal and refuse-derived fuel without the aid of a control device, potential particulate emissions are above the 100 tons per year major source threshold; therefore, 40 CFR Part 64 Compliance Assurance Monitoring is required.
Attachment B Continued
10 CSR 10-6.405 Compliance Demonstration

Controlled Calculations

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-04</td>
<td>Bituminous Coal</td>
<td>CD-1 Baghouse</td>
<td>99%</td>
<td>0.01</td>
<td>0.31</td>
<td>2.25</td>
</tr>
<tr>
<td></td>
<td>Refuse-Derived Fuel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-05</td>
<td>Bituminous Coal</td>
<td>CD-2 Baghouse</td>
<td>99%</td>
<td>0.01</td>
<td>0.31</td>
<td>9.66</td>
</tr>
<tr>
<td>EP-18</td>
<td>Refuse-Derived Fuel</td>
<td>CD-3 Multiclone</td>
<td>93%</td>
<td>0.18</td>
<td>0.19</td>
<td>4.99</td>
</tr>
</tbody>
</table>

EP-04 and EP-05 were given 99 percent control efficiencies for baghouses. The permittee is in compliance with the PM limits while meeting the requirements of their Compliance Assurance Monitoring plan.

EP-18 was given a 93 percent control efficiency for a medium efficiency multiclone. The permittee is in compliance with the PM limit while the multiclone is being properly maintained and operated.
## Attachment C
Method 22 Opacity Observations

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Emission Unit</th>
<th>Visible Emissions</th>
<th>Excess Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>No</td>
<td>Yes¹</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cause</td>
<td>Corrective Action</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Initial</td>
</tr>
</tbody>
</table>

¹If there are visible emissions, the permittee shall perform corrective action to halt the emissions or the permittee shall conduct a Method 9 using Attachment D.
## Attachment D
### Method 9 Opacity Observations

<table>
<thead>
<tr>
<th>Company</th>
<th>Observer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Observer Certification Date</td>
</tr>
<tr>
<td>Date</td>
<td>Emission Unit</td>
</tr>
<tr>
<td>Time</td>
<td>Control Device</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hour</th>
<th>Minute</th>
<th>Seconds</th>
<th>Steam Plume (check if applicable)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0 15 30 45</td>
<td>Attached Detached</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SUMMARY OF AVERAGE OPACITY

<table>
<thead>
<tr>
<th>Set Number</th>
<th>Time</th>
<th>Opacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Start</td>
<td>End</td>
</tr>
</tbody>
</table>

Readings ranged from ____________ to ____________ percent opacity.

Was the emission unit in compliance at the time of evaluation? _____ 

YES NO Signature of Observer
This sheet covers the period from _______________ to _______________
(month, year)   (month, year)

<table>
<thead>
<tr>
<th>Date</th>
<th>Monthly Totals</th>
<th>12-Month Rolling Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tons of Coal</td>
<td>Tons of Paper</td>
</tr>
<tr>
<td></td>
<td>Combusted</td>
<td>Pellets Combusted</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1A 12-month rolling total of paper pellets less than 6,000 tons and a 12-month rolling total of solid fuel less than 20,000 tons indicates compliance.
Attachment F  
Construction Permit 042001-012  
EP-06 Fogging SO\textsubscript{x} Emissions Tracking Sheet

This sheet covers the period from \underline{_______} \underline{_______} to \underline{_______} \underline{_______}  
(month, year) (month, year)

<table>
<thead>
<tr>
<th>Date</th>
<th>Fuel Type</th>
<th>Additional Monthly Fuel Throughput Due to Fogging (1000 Gallons or MMscf)</th>
<th>SO\textsubscript{x} Emission Factor\textsuperscript{1} (lb/1000 gallons or lb/MMscf)</th>
<th>Monthly SO\textsubscript{x} Emissions\textsuperscript{2} (Tons)</th>
<th>12 Months Rolling Total SO\textsubscript{x} Emissions\textsuperscript{3} (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{1}Natural Gas Emission Factor = 0.94 x % Sulfur = lb SO\textsubscript{x}/MMBtu x gas Btu/scf = lb SO\textsubscript{x}/10\textsuperscript{6}scf  
Fuel Oil No. 2 Emission Factor = 1.01 x % Sulfur = lb SO\textsubscript{x}/MMBtu x fuel MMBtu/10\textsuperscript{3}gal = lb SO\textsubscript{x}/10\textsuperscript{3}gal

\textsuperscript{2}Monthly SO\textsubscript{x} Emissions = Additional Monthly Fuel Throughput Due to Fogging x SO\textsubscript{x} Emission Factor x 0.0005

\textsuperscript{3}12-Month Rolling Total SO\textsubscript{x} emissions of less than 40 tons demonstrates compliance.
Attachment G
Construction Permit 022009-012
EP-07, EP-08, and EP-09 NO\textsubscript{x} Emissions Tracking Sheet

This sheet covers the period from ________________ to ________________.

<table>
<thead>
<tr>
<th>Date</th>
<th>Monthly Amount of Fuel Combusted(^1) (1000 gallons)</th>
<th>NO\textsubscript{x} Emission Factor (lb/1000 gallons)</th>
<th>Monthly NO\textsubscript{x} Emissions(^2) (tons)</th>
<th>12-Month Rolling Total NO\textsubscript{x} Emissions (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>438.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>438.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>438.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>438.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>438.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>438.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>438.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>438.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>438.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>438.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>438.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>438.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>438.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Total amount of fuel oil #2 combusted from the three diesel engine-generators (EP-07, EP-08, and EP-09)
\(^2\) Monthly NO\textsubscript{x} Emissions = Monthly Amount of Fuel Combusted x NO\textsubscript{x} Emission Factor x 0.0005
\(^3\) 12-Month Rolling Total NO\textsubscript{x} Emissions = The sum of the most recent 12 months Monthly NO\textsubscript{x} Emissions. 12-Month Rolling Total NO\textsubscript{x} Emissions less than 40 tons/yr indicates compliance.
This sheet covers the period from _____________ to _____________
(month, year)    (month, year)

<table>
<thead>
<tr>
<th>Date</th>
<th>Monthly Amount of Fuel Oil #2 Combusted (Gallons)</th>
<th>12-Month Rolling Total Amount of Fuel Oil #2 Combusted(^1) (Ton/Yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) 12-Month Rolling Total Amount of Fuel Oil #2 Combusted = The sum of the most recent 12 months Monthly Amount of Fuel Oil #2 Combusted. A 12-Month Rolling Total Amount of Fuel Oil #2 Combusted less than 42 gallons indicates compliance.
## Attachment I

**Fugitive Emission Observations**

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Visible Emissions Beyond Property Boundary</th>
<th>Excess Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>Cause</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes*</td>
<td>Corrective Action</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Initial</td>
<td></td>
</tr>
</tbody>
</table>

*If there are visible emissions beyond the property boundary the permittee shall complete the excess emissions columns.*
Attachment J
10 CSR 10-6.260 Compliance Demonstration

This attachment may be used to demonstrate that the listed emission units are in compliance with 10 CSR 10-6.260, Restriction of Emission of Sulfur Compounds.

10 CSR 10-6.260(3)(C)2.A prohibits the emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of 8 lb/MMBtu.

Date (Month/Day/Year):

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Fuel</th>
<th>Emission Factor(^2)</th>
<th>Heat Content (MMBtu/ton)</th>
<th>Emission Factor (lb/MMBtu)</th>
<th>Emission Limit (lb/MMBtu)</th>
<th>Is the Emission Unit in compliance?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-04</td>
<td>Bituminous Coal</td>
<td>38S lb/ton S = %</td>
<td></td>
<td>17</td>
<td>0.1</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Refuse-Derived Fuel(^1)</td>
<td>1.7 lb/ton</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-05</td>
<td>Bituminous Coal</td>
<td>38S lb/ton S = %</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-18</td>
<td>Refuse-Derived Fuel(^1)</td>
<td>1.7 lb/ton</td>
<td></td>
<td>17</td>
<td>0.1</td>
<td>Yes.</td>
</tr>
</tbody>
</table>

\(^1\) Refuse-derived fuel was assumed to have an average heating value of 8,500 Btu/lb.

\(^2\) The bituminous coal emission factor was taken from AP-42 Table 1.1-3 for Process SCCs 10100204 (EP-04) and 10100202 (EP-05). The refuse-derived fuel emission factor was taken from FIRE for Process SCC 10301202.

The calculations demonstrate that EP-04 is always in compliance with this regulation while combusting Refuse-Derived Fuel.

The calculations demonstrate that EP-18 is always in compliance with this regulation while combusting Refuse-Derived Fuel.

The permittee shall calculate their bituminous coal SO\(_2\) emissions at least once each week to demonstrate compliance. The calculations shall be performed as follows:

\[
\text{Emission Factor (lbs/MMBtu)} = \frac{38 \text{ (lb/ton)} \times \% \text{ Sulfur}}{\text{Heat Content (MMBtu/ton)}}
\]

The percent sulfur and the heat content of the bituminous coal combusted shall be obtained by coal analysis or coal supplier data.
STATEMENT OF BASIS

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

1) Part 70 Operating Permit OP2010-059, Issued June 17, 2010
4) U.S. EPA’s Factor Information Retrieval (FIRE) Date System 6.25
5) Construction Permit 0493-002, Issued April 6, 1993
6) Construction Permit 1189-012, Issued November 15, 1989
7) Construction Permit 1191-010, Issued November 15, 1991
8) Construction Permit 1191-010A, Issued April 29, 1992
9) Construction Permit 0695-024, Issued June 20, 1995
10) Construction Permit 042001-012, Issued April 5, 2001
11) Construction Permit 092002-007, Issued August 5, 2002
12) Construction Permit 022009-012, Issued February 27, 2009

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

10 CSR 10-6.100 *Alternate Emission Limits* is not applicable to the installation and has not been applied within this permit. This regulation applies to installations that emit VOCs in ozone nonattainment areas. [10 CSR 10-6.100(1)(A)] The installation is not located in an ozone nonattainment area.

10 CSR 10-6.270 *Acid Rain Source Permits Required* is not applicable to the installation and has not been applied within this permit. This regulation is applicable to generators installed after November 15, 1990 or any generator with a nameplate capacity greater than 25 MWe. [§72.6(3)] None of the existing generators have a nameplate capacity greater than 25 MWe. EP-11 Generator Unit 11 received a new unit exemption from EPA effective December 31, 1994.

10 CSR 10-6.350 *Emission Limitations and Emissions Trading of Oxides of Nitrogen* is not applicable to the installation and has not been applied within this permit. This regulation is applicable to fossil fuel-fired electric generating units that serve a generator with a nameplate capacity greater than 25 MWe. [10 CSR 10-6.350(1)(A)] None of the generators have a nameplate capacity greater than 25 MWe.

10 CSR 10-6.362, 6.364, and 6.366 *Clean Air Interstate Rule (CAIR)* are not applicable to the installation and have not been applied within this permit. CAIR is applicable to stationary fossil-fuel fired boilers and combustion turbines serving a generator with a nameplate capacity greater than 25 MWe. [10 CSR 10-6.362(1)(A)1, 6.364(1)(A)1, and 6.366(1)(A)1] None of the generators have a nameplate capacity greater than 25 MWe.
10 CSR 10-6.368 *Control of Mercury Emissions From Electric Generating Units* is not applicable to the installation and has not been applied within this permit. This regulation is applicable to stationary fossil-fuel fired boilers and combustion turbines serving a generator with a nameplate capacity greater than 25 MWe. [10 CSR 10-6.368(1)(A)1] None of the generators have a nameplate capacity greater than 25 MWe.

**Construction Permits**

Construction Permit 0493-002, Issued April 6, 1993:
- This Prevention of Significant Deterioration (PSD) construction permit is for the installation of EP-11 Generator.
- Special Conditions 1 – 7, 13, and 15 – 17 have been applied within Permit Condition EP-11 – 001.
- Special Condition 7 limited the installation to firing fuel containing 0.28 percent sulfur or less; however, the installation’s 10 CSR 10-6.260 limitation is 0.25932 percent.
- Special Conditions 8 – 12 and 14 have not been applied within this operating permit. These special conditions required stack testing. The stack testing has already been completed.

Construction Permit 1189-012, Issued November 15, 1989:
- This de minimis construction permit is for the installation of EP-10 Generator.
- This construction permit was superseded by Construction Permit 1191-010.

Construction Permit 1191-010, Issued November 15, 1991:
Construction Permit 1191-010A, Issued April 29, 1992:
- This PSD construction permit is to increase the usage of EP-10 Generator from 800 hr/yr to 8,760 hr/yr.
- Amendment A removed the requirement to analyze the nitrogen content of the fuel oil from Special Condition 11.
- Special Conditions 1 – 4 and 10 – 14 have been applied within Permit Condition EP-10 – 001.
- Special Conditions 5 – 9 have not been applied within this operating permit. These special conditions required stack testing. The stack testing has already been completed.

Construction Permit 0695-024, Issued June 20, 1995:
- This de minimis construction permit allows the combustion of refuse-derived fuel (RDF) within EP-04 Boiler Unit 4.
- Special Conditions 1 – 4 have been applied within Permit Condition EP-04 – 004.

Construction Permit 042001-012, Issued April 5, 2001:
- This de minimis construction permit is for a water fogging system on EP-06 Combustion Turbine Unit 6.
- Special Conditions 1 and 3 were not incorporated into this operating permit. Special Condition 1 limits the increase in NOx emissions due to use of the water fogging system to 40 tons/yr; however, stack testing conducted on August 1, 2002 to fulfill the requirements of Special Condition 3 documented that using the water fogging system actually decreases NOx emissions.
- Special Condition 2 has been applied within Permit Condition EP-06 – 001.
Construction Permit 092002-007, Issued August 5, 2002:
- This de minimis construction permit is for the installation of EP-18 Boiler.
- Special Condition 1 was not incorporated into this operating permit. This special condition requires stack testing to determine NOx and CO emissions. This stack testing has been completed.
- Special Conditions 2 and 3 have been applied within Permit Condition EP-18 – 001.
- Special Condition 4 was not incorporated into this operating permit. This special condition limits the boiler to only combusting paper pellets and fuel oil #2; however, the installation received a No Construction Permit Required Determination on September 20, 2010 allowing the boiler to also combust natural gas.

Construction Permit 022009-012, Issued February 27, 2009:
- This de minimis construction permit is for the installation EP-07, EP-08, and EP-09 Peaking Units 7, 8, and 9.
- Special Condition 1 has been applied within Permit Conditions EP-07 – 001, EP-08 – 001, and EP-09 – 001.

New Source Performance Standards (NSPS) Applicability

40 CFR Part 60, Subparts D and Da – Standards of Performance for Steam Generating Units are not applicable to the installation and have not been applied within this permit. Subparts D and Da are only applicable to steam generating units with a heat input rate greater than 250 MMBtu/hr constructed after August 17, 1971. [§60.40(a) and §60.40a(a)] EP-03, EP-04, and EP-05 were all constructed prior to August 17, 1971.

40 CFR Part 60, Subparts Db and Dc – Standards of Performance for Steam Generating Units are not applicable to the installation and have not been applied within this permit. Subpart Db is only applicable to steam generating units with a heat input rate greater than 100 MMBtu/hr constructed after June 19, 1984. [§60.40b(a)] Subpart Dc is only applicable to steam generating units with a heat input rate greater than 10 MMBtu/hr constructed after June 9, 1989. [§60.40c(a)] EP-18 was constructed after the applicable dates; however, the boiler is only rated at 5.25 MMBtu/hr.

40 CFR Part 60, Subparts K, Ka, and Kb – Standards of Performance for Storage Vessels are not applicable to the installation and have not been applied within this permit. Subparts K and Ka are only applicable to storage vessels greater than 40,000 gallons in capacity constructed after June 11, 1973. [§60.110(a) and §60.110a(a)] Subpart Kb is only applicable to storage vessels greater than 75 m³ (19,182 gallons) in capacity constructed after July 23, 1984. [§60.110b(a)] The only tanks located at the installation that are larger than 19,182 gallons were constructed in 1972 prior to the applicable dates.

40 CFR Part 60, Subpart Y – Standards of Performance for Coal Preparation and Processing Plants is not applicable to the installation and has not been applied within this permit. This regulation is applicable to coal preparation and processing plant processing more than 200 tons per day constructed after October 27, 1974. [§60.250(a) and (b)] EP-12 Clean Coal Storage was constructed prior to the applicable date.

40 CFR Part 60, Subpart GG – Standards of Performance for Stationary Gas Turbines is not applicable to the installation and has not been applied within this permit. This regulation is applicable to stationary
gas turbines with a heat input greater than 10 MMBtu/hr constructed after October 3, 1977. [§60.330(a) and (b)] EP-06 Combustion Turbine Unit 6 was originally constructed in 1973, but was modified when a fogger was added under Construction Permit 042001-012; however, the construction permit indicated that Subpart GG did not apply as long as the emissions of regulated air pollutants did not exceed those of the turbine operating without the fogger at maximum load, under cold weather ambient conditions.

40 CFR Part 60, Subpart AAAA — Standards of Performance for Small Municipal Waste Combustion Units is not applicable to the installation and has not been applied within this permit. This regulation applies to municipal waste combustion units having a capacity to combust 35 ton/day constructed after August 30, 1999. [§60.1010(b)] EP-18 Boiler was constructed in 2003 after the applicable date; however, at maximum design rating, the boiler can only combust 10.4 tons of refuse-derived fuel per day.

40 CFR Part 60, Subpart BBBB — Standards of Performance for Small Municipal Waste Combustion Units is not applicable to the installation and has not been applied within this permit. This regulation applies to municipal waste combustion units having a capacity to combust 35 ton/day constructed before August 30, 1999. [§60.1550(a)(1)] EP-04 Boiler Unit 4 was constructed before August 30, 1999; however, the boiler is restricted to burning less than 6,000 tons of RDF per year (0.68 tons/day).

40 CFR Part 60, Subpart HHHH — Emission Guidelines and Compliance Times for Coal-Fired Electric Steam Generating Units is not applicable to the installation and has not been applied within this permit. This regulation applies to coal-fired boilers and combustion turbines serving a generator with a nameplate capacity greater than 25 MWe. [§60.4104(a)] Neither of the coal-fired boilers (EP-04 and EP-05) serves a generator with a nameplate capacity greater than 25 MWe.

40 CFR Part 60, Subpart IIII — Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE) is not applicable to the installation and has not been applied within this permit. This regulation applied to ICE constructed after July 11, 2005. [§60.4200(a)(2)] All of the ICE at the installation were constructed prior to the applicable date.

40 CFR Part 60, Subpart KKKK— Standards of Performance for Stationary Combustion Turbines is not applicable to the installation and has not been applied within this permit. This regulation applies to stationary combustion turbines constructed after February 18, 2005. [§60.4300] EP-06 Combustion Turbine Unit 6 was constructed in 1973 and has not be reconstructed/modified since.

Maximum Achievable Control Technology (MACT) Applicability

40 CFR Part 63, Subpart Q — National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers is not applicable to the installation and has not been applied within this permit. This regulation applies cooling towers operated with chromium-based water treatment chemicals. [§63.400(a)] The cooling tower chemicals used by the installation do no contain chromium.

40 CFR Part 63, Subpart T — National Emission Standards for Halogenated Solvent Cleaning is not applicable to the installation and has not been applied within this permit. This regulation applies to solvent cleaning machines using solvent containing methylene chloride (75-09-2), perchloroethylene (127-18-4), trichloroethylene (79-01-6), 1,1,1-trichloroethane (71-55-6), carbon tetrachloride (56-23-5),
or chloroform (67-66-3). [§63.460(a)] The parts washer solvent does not contain any of the listed chemicals.

40 CFR Part 63, Subpart YYYYY – National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines is not applicable to the installation and has not been applied within this permit. This regulation applies to stationary combustion turbines at major sources of HAPs. [§63.6080] Existing stationary combustion turbines (defined at §63.6090(a)(1) as constructed prior to January 14, 2003) do not have to meet the requirements of this subpart per §63.090(b)(4). EP-06 Combustion Turbine Unit 6 was constructed in 1973 and has not since been reconstructed/modified.


On May 18, 2011, EPA announced that it would stay the effective date of this rule for an undetermined period in order to allow for additional public input. When EPA issues this rule as final, affected units at the installation will be required to comply with the revised rule; this permit may be reopened at that time to incorporate the revised rule. Until such a time as the rule is issued as final, this standard is treated as if it has not yet been promulgated.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

40 CFR Part 61, Subpart M – National Emission Standards for Asbestos is applicable to the installation and has been applied within this permit (see Section IV. Core Permit Requirements).

Compliance Assurance Monitoring (CAM) Applicability

40 CFR Part 64, Compliance Assurance Monitoring (CAM)
The CAM rule applies to each pollutant specific emission unit that:
- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.

40 CFR Part 64 is applicable to EP-04 and EP-05 as they require control devices to meet the emission limits of 10 CSR 10-3.060 and have pre-control emissions greater than the major source threshold (see Permit Conditions EP-04 -001 and EP-05 – 001).

Greenhouse Gas Emissions

On May 13, 2010, EPA issued the GHG Tailoring Rule which set the major source threshold for CO₂e to be 100,000 ton/year within 40 CFR Part 70. As of July 1, 2011, all Title V operating permits are required to include GHG emissions. Potential emissions of greenhouse gases (CO₂e) for this installation are calculated to be 657,921.10 tons, classifying the installation as a major source of GHGs. Please note
that the potential emissions of greenhouse gases from this installation are only for stationary sources as §70.2 defines emission unit as “any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Section 112(b) of the Act.”

This source is subject to 40 CFR Part 98 – Mandatory Greenhouse Gas Reporting Rule. However, 40 CFR Part 98 is not an applicable requirement under 40 CFR Part 70; therefore Part 98 requirements were not included within this operating permit. In addition, Missouri regulations do not require the installation to report CO₂ emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation’s actual CO₂ emissions were not included within this permit. The applicant is required to report actual CO₂ emissions data directly to EPA.

Other Regulatory Determinations

10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants is applicable to the installation and has been applied within this permit (see Permit Conditions EP-04 -002, EP-05 – 002, and EP-18 -002). This regulation is applicable to sources of visible emissions. This regulation is applicable to EP-03 Boiler Unit 3 but was not applied within this permit. Potential emissions of particulate matter from EP-03 were calculated to be to less than 0.5 lb/hr; therefore, the emission unit is assumed to be in compliance with this regulation – no monitoring, recordkeeping, or reporting is required at this time. This regulation is not applicable to EP-06, EP-07, EP-08, EP-09, EP-10, or EP-11 as 10 CSR 10-6.220(1)(A) exempts internal combustion engines.


\[
500 \text{ ppmv} \times 1.66 \times 10^{-7} \text{ lb/scf-ppmw} \times 1,420 \text{ scf/MMBtu} \times (64.066/24.04 \text{ ppmw/ppmv}) = 1.01S \text{ lb/MMBtu}
\]

\[
0.26191 \text{ lb/MMBtu} = 1.01S \text{ lb/MMBtu}
\]

\[
S = 0.25932 \text{ percent}
\]

Where:

- 500 ppmv = 10 CSR 10-6.260(3)(A)2 emission limitation.
- 1.66 \times 10^{-7} \text{ lb/scf-ppmw} = conversion factor obtained from 40 CFR Part 60 Appendix A-7 Table 19-1.
- 1,420 scf/MMBtu = F factor obtained from 40 CFR Part 60 Appendix A-7 Table 19-2.
- 64.066/24.04 ppmw/ppmv = M/24.04 = conversion factor obtained from AP-42 Appendix A.
- 1.01S = emission factor taken from AP-42 Tables 3.1-2a and 3.4-1.
10 CSR 10-6.405 Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used For Indirect Heating is applicable to the installation and has been applied within this permit (see Permit Condition). EP-03 Boiler Unit 3 is exempt from this regulation per 10 CSR 10-6.405(1)(C) as it exclusively combusts natural gas; however, the boiler is required to be included in the calculation to determine Q per 10 CSR 10-6.405(1)(D).

The determinations made within this permit are based upon the following installation-wide potential emission calculations:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Potential to Emit (ton/yr)(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>1,201.22</td>
</tr>
<tr>
<td>(\text{CO}_2\text{e})</td>
<td>657,921.10</td>
</tr>
<tr>
<td>(\text{NH}_3)</td>
<td>74.33</td>
</tr>
<tr>
<td>(\text{NO}_x)</td>
<td>4,708.48</td>
</tr>
<tr>
<td>PM CON</td>
<td>296.55</td>
</tr>
<tr>
<td>(\text{PM}_{10})</td>
<td>2,947.82</td>
</tr>
<tr>
<td>(\text{PM}_{2.5})</td>
<td>506.38</td>
</tr>
<tr>
<td>(\text{SO}_x)</td>
<td>8,268.65</td>
</tr>
<tr>
<td>VOC</td>
<td>213.97</td>
</tr>
<tr>
<td>HAP</td>
<td>101.00</td>
</tr>
<tr>
<td>Hydrogen chloride (7647-01-0)</td>
<td>81.00</td>
</tr>
<tr>
<td>Hydrogen fluoride (7664-39-3)</td>
<td>8.67</td>
</tr>
<tr>
<td>Hexane (110-54-3)</td>
<td>3.99</td>
</tr>
<tr>
<td>Formaldehyde (50-00-0)</td>
<td>3.65</td>
</tr>
<tr>
<td>Toluene (108-88-3)</td>
<td>2.70</td>
</tr>
<tr>
<td>Benzene (71-43-2)</td>
<td>2.36</td>
</tr>
<tr>
<td>Manganese compounds (20-12-2)</td>
<td>1.00</td>
</tr>
<tr>
<td>Acrolein (107-02-8)</td>
<td>0.81</td>
</tr>
<tr>
<td>Naphthalene (91-20-3)</td>
<td>0.73</td>
</tr>
<tr>
<td>Xylene (1330-20-7)</td>
<td>0.73</td>
</tr>
<tr>
<td>Lead Compounds (20-11-1)</td>
<td>0.54</td>
</tr>
</tbody>
</table>

\(^1\)Potential emissions are based upon 8,760 hours of uncontrolled annual operation unless otherwise noted:

- \(\text{CO}_2\text{e}\) emissions from the combustion of refuse-derived fuel within EP-04 and EP-18 are not included within the potential emissions. On July 20, 2011 the EPA finalized a rule deferring the permitting of \(\text{CO}_2\text{e}\) emissions from bioenergy and other biogenic sources under PSD and Title V for a three year period.
  - EP-04: Bituminous coal was the worst case fuel for CO, \(\text{CO}_2\text{e}\), \(\text{NH}_3\), \(\text{NO}_x\), \(\text{SO}_x\), Hydrogen Fluoride, and Formaldehyde. Natural gas was the worst case fuel for VOC, Hexane, Toluene, Benzene, Manganese Compounds, Naphthalene, and Polycyclic Organic Matter. Refuse-derived fuel was the worst case for PM CON, \(\text{PM}_{10}\), \(\text{PM}_{2.5}\), HAP, Hydrogen Chloride, and Lead Compounds.
  - EP-05: Bituminous coal was the worst case fuel for \(\text{CO}_2\text{e}\); PM CON; \(\text{PM}_{10}\); \(\text{PM}_{2.5}\); \(\text{NH}_3\); \(\text{NO}_x\); \(\text{SO}_x\); HAP; Hydrogen Chloride; Hydrogen Fluoride; Toluene; Benzene; Acrolein; Xylene; Manganese and Lead Compounds; and Polycyclic Organic Compounds. Natural gas was the worst case for CO, VOC, Hexane, Formaldehyde, and Naphthalene.
  - EP-06: Fuel oil #2 was the worst case fuel for \(\text{CO}_2\text{e}\); PM CON; \(\text{PM}_{10}\); \(\text{PM}_{2.5}\); \(\text{NH}_3\); \(\text{NO}_x\); \(\text{SO}_x\); Benzene; Manganese and Lead Compounds; Naphthalene; and Polycyclic Organic Matter. Natural gas was the worst case fuel for CO, VOC, HAP, Formaldehyde, Toluene, Acrolein, and Xylene.
  - EP-18: Natural gas was the worst case fuel for \(\text{CO}_2\text{e}\); PM CON; \(\text{NH}_3\); VOC; Hexane; Formaldehyde; Toluene; Benzene; Manganese and Lead Compounds; Naphthalene; and Polycyclic Organic Matter. Refuse-derived fuel was the worst case fuel for CO, \(\text{PM}_{10}\), \(\text{PM}_{2.5}\), \(\text{NO}_x\), \(\text{SO}_x\), HAP, and Hydrogen Chloride.

- Potential emissions from EP-10 were limited by Construction Permit 1191-010 to 10.87 lb CO/hr (32.6 lb/3 hrs), 32 lb \(\text{NO}_x\)/hr (96 lb/3 hrs), and 4.47 lb VOC/hr (13.4 lb/3 hrs).
Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

1) The specific pollutant regulated by that rule is not emitted by the installation;
2) The installation is not in the source category regulated by that rule;
3) The installation is not in the county or specific area that is regulated under the authority of that rule;
4) The installation does not contain the type of emission unit which is regulated by that rule;
5) The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the Air Pollution Control Program a schedule for achieving compliance for that regulation(s).

Prepared by:

Alana L. Rugen
Environmental Engineer
Mr. Kyle D. Gibbs
Marshall Municipal Utilities Power Plant
75 East Morgan
Marshall, MO 65340

Re: Marshall Municipal Utilities Power Plant, 195-0010
Permit Number: OP2010-059A

Dear Mr. Gibbs:

Enclosed with this letter is your amended Part 70 operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

The amended permit contains the following revisions:

- Addition of natural gas as a fuel source for EP-18 per your request.


- Formatting changes per new policy.

- Potential and actual emissions from the installation per new policy and per new Title V requirements.

- Removal of rescinded indirect heating rule 10 CSR 10-3.060 and replacement with new indirect heating rule 10 CSR 10-6.405.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.078.16 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.
If you have any questions or need additional information regarding this permit, please do not hesitate to contact Alana Rugen at the Department’s Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.
Operating Permit Unit Chief

MJS:ark

Enclosures

c: Northeast Regional Office
   PAMS File: 2011-02-035