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: OP2011-061
Expiration Date: DEC 27 2016
Installation ID: 099-0014
Project Number: 2011-08-030

Installation Name and Address
Dow Chemical Co. - Riverside
500 Dow Industrial Dr.
Pevely, MO 63070
Jefferson County

Parent Company's Name and Address
Dow Chemical Co.
2030 Dow Center
Midland, MI 48674

Installation Description:
Dow Chemical Co. - Riverside produces extruded polystyrene foam products. Polystyrene copolymer is mixed with additives en route to the die and forming process. The copolymer is extruded and the blowing agent is introduced to form Styrofoam. After the foam is created, it is then cooled, trimmed, and cut for wrapping and storage. The installation is a major source of Particulate Matter ≤ Ten Microns (PM<sub>10</sub>) and Greenhouse Gases (CO<sub>2</sub>e).

DEC 28 2011
Director or Designee
Department of Natural Resources
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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

Dow Chemical Co. - Riverside produces extruded polystyrene foam products. Polystyrene copolymer is mixed with additives en route to the die and forming process. The copolymer is extruded and the blowing agent is introduced to form Styrofoam. After the foam is created, it is then cooled, trimmed, and cut for wrapping and storage. The installation is a major source of Particulate Matter ≤ Ten Microns (PM10) and Greenhouse Gases (CO2e).

<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>-</td>
<td>-</td>
<td>1.11</td>
<td>1.03</td>
<td>1.15</td>
</tr>
<tr>
<td>Ammonia (NH3)</td>
<td>-</td>
<td>-</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>Nitrogen Oxides (NOx)</td>
<td>-</td>
<td>-</td>
<td>1.32</td>
<td>1.22</td>
<td>1.37</td>
</tr>
<tr>
<td>Particulate Matter ≤ Ten Microns (PM10)</td>
<td>-</td>
<td>-</td>
<td>0.16</td>
<td>0.15</td>
<td>0.16</td>
</tr>
<tr>
<td>Particulate Matter ≤ 2.5 Microns (PM2.5)</td>
<td>-</td>
<td>-</td>
<td>0.10</td>
<td>0.09</td>
<td>0.10</td>
</tr>
<tr>
<td>Sulfur Oxides (SOx)</td>
<td>-</td>
<td>-</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOC)</td>
<td>0.95</td>
<td>1.91</td>
<td>1.42</td>
<td>1.34</td>
<td>3.31</td>
</tr>
<tr>
<td>Hazardous Air Pollutants (HAPs)</td>
<td>0.95</td>
<td>1.90</td>
<td>1.64</td>
<td>1.62</td>
<td>2.82</td>
</tr>
<tr>
<td>Styrene (100-42-5)</td>
<td>0.62</td>
<td>1.45</td>
<td>1.31</td>
<td>1.30</td>
<td>1.53</td>
</tr>
<tr>
<td>Ethylbenzene (100-41-4)</td>
<td>0.31</td>
<td>0.45</td>
<td>0.32</td>
<td>0.31</td>
<td>1.17</td>
</tr>
<tr>
<td>Xylene (1330-20-7)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.08</td>
</tr>
<tr>
<td>Toluene (108-88-3)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.03</td>
</tr>
<tr>
<td>Acrylonitrile (107-13-1)</td>
<td>0.01</td>
<td>0.01</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dibutyl Phthalate (84-74-2)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.01</td>
</tr>
</tbody>
</table>
EMISSION UNITS WITH LIMITATIONS
The following list provides a description of the equipment at this installation that emits air pollutants and that are identified as having unit-specific emission limitations.

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-04</td>
<td>M/L Baghouse</td>
</tr>
<tr>
<td>EP-05</td>
<td>48&quot; Line Baghouse</td>
</tr>
<tr>
<td>EP-06</td>
<td>M/L Polystyrene Feed Hoppers</td>
</tr>
<tr>
<td>EP-07</td>
<td>48&quot; Line Polystyrene Feed Hoppers</td>
</tr>
<tr>
<td>EP-10</td>
<td>Central Vacuum System</td>
</tr>
<tr>
<td>EP-13</td>
<td>M/L Recycle Feed Hopper</td>
</tr>
<tr>
<td>EP-16</td>
<td>48&quot; Line Recycle Feed Hopper</td>
</tr>
<tr>
<td>EP-19</td>
<td>Polystyrene Storage Silo</td>
</tr>
<tr>
<td>EP-20</td>
<td>Recycle Storage Silo</td>
</tr>
<tr>
<td>EP-33</td>
<td>Polystyrene Storage Silo</td>
</tr>
<tr>
<td>EP-34</td>
<td>Silo Fines Removal Baghouse</td>
</tr>
<tr>
<td>EP-36</td>
<td>Polystyrene Hoppers</td>
</tr>
<tr>
<td>EP-37</td>
<td>Railcar &amp; Hopper Trucks</td>
</tr>
<tr>
<td>EP-57</td>
<td>340 HP Diesel Emergency Fire Pump</td>
</tr>
<tr>
<td>EP-63</td>
<td>115 HP Natural Gas Emergency Generator</td>
</tr>
</tbody>
</table>

EMISSION UNITS WITHOUT LIMITATIONS
The following list provides a description of the equipment that 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-01</td>
<td>M/L Additive Feed Hoppers</td>
</tr>
<tr>
<td>EP-02</td>
<td>M/L Reclaim Feed Vent</td>
</tr>
<tr>
<td>EP-03</td>
<td>48&quot; Line Additive Feed Hoppers</td>
</tr>
<tr>
<td>EP-14</td>
<td>48&quot; Line Reclaim Feed Vent</td>
</tr>
<tr>
<td>EP-15</td>
<td>Die Vents</td>
</tr>
<tr>
<td>EP-17</td>
<td>Conversion Losses</td>
</tr>
<tr>
<td>EP-27C</td>
<td>Boiler #1 East</td>
</tr>
<tr>
<td>EP-27D</td>
<td>Boiler #2 West</td>
</tr>
<tr>
<td>EP-28</td>
<td>Post Die Finishing Losses</td>
</tr>
<tr>
<td>EP-39</td>
<td>Emissions From Storage</td>
</tr>
<tr>
<td>EP-44</td>
<td>134a Tank</td>
</tr>
<tr>
<td>EP-45</td>
<td>Empty Tank</td>
</tr>
<tr>
<td>EP-47</td>
<td>Facility Maintenance Painting</td>
</tr>
<tr>
<td>EP-58</td>
<td>Space Heaters</td>
</tr>
<tr>
<td>EP-64</td>
<td>R-152a Tank</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 as of the date that this permit is issued.

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.

PERMIT CONDITION 001
EP-04 M/L Baghouse and EP-05 48” Line Baghouse
10 CSR 10-6.060 Construction Permits Required
Construction Permit 092008-009B, Issued July 9, 2009

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-04</td>
<td>M/L Baghouse</td>
</tr>
<tr>
<td>EP-05</td>
<td>48” line Baghouse</td>
</tr>
</tbody>
</table>

Operational Limitations:
1. Special Condition 1.A: The permittee shall control emissions from EP-04 and EP-05 using baghouses. The baghouses shall be operated and maintained in accordance with the manufacturer's specifications. The baghouses shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that the Department of Natural Resources’ employees may easily observe them.
2. Special Condition 1.B: Replacement filters for the baghouses 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).
3. The permittee shall maintain and operate the baghouses according to the manufacturer’s specifications and recommendations.
4. The baghouses shall be operated such that the minimum pressure drop across the control device is greater than or equal to 0.5” of water column.
   a) If the differential pressure across the control device falls below 0.5” of water column, the permittee shall inspect the differential pressure gauges for proper operation and then the baghouse.
   b) Exception: Due to a lack of cake on the bag, the permittee is not restricted to a minimum pressure drop across the control device for the first 24 hours after replacement of a bag.

Monitoring/Recordkeeping:
1. Special Condition 1.C: The permittee shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours while the emission units are operating. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
2. Special Condition 1.D: The permittee shall maintain an operating and maintenance log for the baghouses using Attachment A or an equivalent form generated by the permittee which shall include the following:
   a) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
   b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.; and
   c) Dates and times of all bag replacements.
3. The permittee shall retain a copy of the manufacturer’s specifications.
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:**
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 compliance certification required by Section V of this permit.

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**PERMIT CONDITION 002**

**EP-63 115 HP Natural Gas Emergency Generator**

10 CSR 10-6.070 New Source Performance Regulations

40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (SI ICE)

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Model Year</th>
<th>Installation Date</th>
</tr>
</thead>
</table>

**Emission Standards:**

1. The permittee shall comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. If the stationary SI ICE was certified under the certification emission standards in 40 CFR Part 1048 applicable to engines that are not severe duty engines and the certified carbon monoxide (CO) standard is above the standard in Table 1 to this subpart, then the permittee may meet the CO certification (not field testing) standard for which the engine was certified. [§60.4233(e)]

2. The permittee shall operate and maintain the stationary SI ICE to achieve the emission standards as required in §60.4233 over the entire life of the engine. [§60.4234]

**Table 1 to Subpart JJJJ — NO\textsubscript{X} and CO Emission Standards for Stationary Emergency Engines >25 HP**

<table>
<thead>
<tr>
<th>Engine Type</th>
<th>Maximum Engine Power</th>
<th>Emission Standards (g/HP-hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency</td>
<td>25&gt;HP&lt;130</td>
<td>NO\textsubscript{X} + HC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

**Operational Limitation:**
The permittee shall install a non-resettable hour meter upon startup of the emergency engine. [§60.4237(c)]

**Compliance Method:**

1. The permittee shall demonstrate compliance according to the following method: [§60.4243(b)]
   a) Demonstrating compliance with the emission standards specified in §60.4233(e) and according to the requirements specified in §60.4244 and according to the following: [§60.4243(b)(2)]
      i) The permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test to demonstrate compliance. [§60.4243(b)(2)(i)]
2. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited. [§60.4243(d)]

3. The permittee may operate the engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but shall retain records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the permittee is required to conduct a performance test to demonstrate compliance with the emission standards of §60.4233. [§60.4243(e)]

4. If the permittee does not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, the permittee required to perform initial performance testing as indicated in this section, but is not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a). [§60.4243(f)]

5. If an air-to-fuel ratio (AFR) controller is used with the operation of three-way catalysts/non-selective catalytic reduction, the AFR controller shall be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [§60.4243(g)]

**Performance Testing:**

1. While conducting performance tests, the permittee shall follow the procedures in Paragraphs (a) through (e) of this section. [§60.4244]
   a) Each performance test shall be conducted within ten percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart. [§60.4244(a)]
   b) The permittee may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If the stationary SI internal combustion engine is non-operational, the permittee does not need to startup the engine solely to conduct a performance test; however, the permittee shall conduct the performance test immediately upon startup of the engine. [§60.4244(b)]
   c) The permittee shall conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run shall be conducted within ten percent of 100 percent peak (or the highest achievable) load and last at least one hour. [§60.4244(c)]
   d) To determine compliance with the NOx mass per unit output emission limitation, convert the concentration of NOx in the engine exhaust using Equation 1 of this section:
\[ ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{\text{HP-hr}} \]  
Equation 1

Where:
ER = Emission rate of NO\textsubscript{x} in g/HP-hr.

\( C_d \) = Measured NO\textsubscript{x} concentration in parts per million by volume (ppmv).

\( 1.912 \times 10^{-3} \) = Conversion constant for ppm NO\textsubscript{x} to grams per standard cubic meter at 20°C.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr). [§60.4244(d)]

e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

\[ ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{\text{HP-hr}} \]  
Equation 2

Where:
ER = Emission rate of CO in g/HP-hr.

\( C_d \) = Measured CO concentration in ppmv.

\( 1.164 \times 10^{-3} \) = Conversion constant for ppm CO to grams per standard cubic meter at 20°C.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr. [§60.4244(e)]
Table 2 to Subpart JJJJ — Requirements for Performance Tests

<table>
<thead>
<tr>
<th>Compliance Requirement</th>
<th>The permittee shall</th>
<th>Using</th>
<th>According to the following requirements</th>
</tr>
</thead>
</table>
|                        | Select the sampling port location and the number of traverse points | Method 1 or 1A of 40 CFR Part 60, Appendix A or ASTM Method D6522–00(2005)
|                        | Determine the O₂ conc. of the engine exhaust at the sampling port location | Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A or ASTM Method D6522–00(2005)
|                        | Determine the exhaust flowrate of the engine | Method 2 or 19 of 40 CFR Part 60 |  |
|                        | If necessary, measure moisture content of the engine exhaust at the sampling port location | Method 4 of 40 CFR Part 60, Appendix A, Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348–03 (incorporated by reference, see §60.17) | Measurements to determine moisture shall be made at the same time as the measurement for CO and NOₓ conc. |
|                        | Measure CO at the exhaust of the engine | Method 10 of 40 CFR Part 60, Appendix A, ASTM Method D6522–00(2005), Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348–03 (incorporated by reference, see §60.17) | Results of this test consist of the average of the (3) 1-hour or longer runs |
|                        | Measure NOₓ at the exhaust of the engine | Method 7E of 40 CFR Part 60, Appendix A, Method D6522–00(2005), Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348–03 (incorporated by reference, see §60.17) | Results of this test consist of the average of the (3) 1-hour or longer runs |

ASTM D6522–00 is incorporated by reference; see 40 CFR 60.17. Also, the permittee may petition the Administrator for approval to use alternative methods for portable analyzer.

The permittee may use ASME PTC 19.10–1981, Flue and Exhaust Gas Analyses, for measuring the O₂ content of the exhaust gas as an alternative to EPA Method 3B.

Notifications, Recordkeeping, and Reporting:
1. The permittee shall meet the following notification, reporting and recordkeeping requirements: [§60.4245]
   a) The permittee shall retain records of the following information: [§60.4245(a)]
      i) All notifications submitted to comply with this subpart and all documentation supporting any notification. [§60.4245(a)(1)]
      ii) Maintenance conducted on the engine. [§60.4245(a)(2)]
2. The permittee shall retain records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for emergency
operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [§60.4245(b)]

3. The permittee shall submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed. [§60.4245(d)]

4. The permittee shall retain a copy of the manufacturer’s specifications.

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 standards, operational limitation, compliance method, performance testing, 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>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Model Year</th>
<th>Installation Date</th>
</tr>
</thead>
</table>

*Existing stationary CI RICE located at an area source of HAP emissions shall comply with the applicable work practices by no later than May 3, 2013. [§63.6595(a)(1)]*

**Operational Limitations:**

1. Existing stationary RICE located at an area source of HAP emissions shall comply with the work practices in Table 2d to this subpart that apply. [§63.6603(a)]

2. The permittee shall be in compliance with the work practices in this subpart that apply at all times. [§63.6605(a)]

3. At all times the permittee shall operate and maintain the 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)]

4. The permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [§63.6625(e)]
5. The permittee shall install a non-resettable hour meter if one is not already installed. [§63.6625(f)]

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. [§63.6625(h)]

7. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d to this subpart. The oil analysis shall be performed at the same frequency specified for changing the oil in Table 2d to this subpart. The analysis program shall at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee shall change the oil within two days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee shall change the oil within two days or before commencing operation, whichever is later. The permittee shall retain records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program shall be part of the maintenance plan for the engine. [§63.6625(i)]

8. The permittee shall demonstrate continuous compliance with each work practice in Table 2d to this subpart that applies according to methods specified in Table 6 to this subpart. [§63.6640(a)]

9. The permittee shall operate the emergency stationary RICE according to the requirements in Paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in Paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If the permittee does not operate the engine according to the requirements in Paragraphs (f)(1)(i) through (iii) of this section, the engine shall not be considered an emergency engine under this subpart and shall meet all requirements for non-emergency engines. [§63.6640(f)(1)]

   a) There is no time limit on the use of emergency stationary RICE in emergency situations. [§63.6640(f)(1)(i)]

   b) The permittee may operate the emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee retains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [§63.6640(f)(1)(ii)]

   c) The permittee may operate the emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that the permittee may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for
more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation shall be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this Paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power. [§63.6640(f)(1)(iii)]

Table 2d to Subpart ZZZZ of Part 63 — Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

<table>
<thead>
<tr>
<th>RICE type</th>
<th>Work Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency stationary CI RICE $^2$</td>
<td>Change oil and filter every 500 hrs of operation or annually, whichever comes 1st, and replace as necessary. Inspect air cleaner every 1,000 hrs of operation or annually, whichever comes 1st; and Inspect all hoses and belts every 500 hrs of operation or annually, whichever comes 1st, and replace as necessary.</td>
</tr>
</tbody>
</table>

$^2$Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

$^3$If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practices on the schedule required in Table 2d of this subpart, or if performing the work practices on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practices can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practices should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources shall report any failure to perform the work practices on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

Table 6 to Subpart ZZZZ of Part 63 — Continuous Compliance With Work Practices

<table>
<thead>
<tr>
<th>RICE Type</th>
<th>Requirement</th>
<th>Method of demonstrating continuous compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing emergency stationary RICE located at an area source of HAP</td>
<td>Work practices</td>
<td>Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or Develop and follow a maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions</td>
</tr>
</tbody>
</table>

Recordkeeping:

1. The permittee shall retain the following records: [§63.6655(a)]
   a) A copy of each report submitted to comply with this subpart. [§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 all required maintenance performed on the air pollution control and monitoring equipment. [§63.6655(a)(4)]
   d) 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. The permittee shall retain the records required in Table 6 of this subpart to show continuous compliance with each work practice that applies. [§63.6655(d)]
3. The permittee shall retain records of the maintenance conducted on the stationary RICE in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to their maintenance plan. [§63.6655(e)]

4. The permittee shall retain records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the permittee shall retain records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [§63.6655(f)]

5. Records shall be in a form suitable and readily available for expeditious review according to §63.10(b)(1). [§63.6660(a)]

6. As specified in §63.10(b)(1), the permittee shall retain each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§63.6660(b)]

7. 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)]

**Reporting:**

1. The permittee shall report each instance in which the permittee did not meet the work practices in Table 2d 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. [§63.6640(b)]

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

3. 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 on May 3, 2013 and ending on June 30. [§63.6650(b)(1)]
   b) 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)]
   c) The permittee may submit the first and subsequent Compliance reports as part of their semi-annual monitoring report required by Section V of this permit. [§63.6650(b)(5)]

4. 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. 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 were no deviations from any work practices that apply, a statement that there were no deviations from the work practices during the reporting period. [§63.6650(c)(5)]
5. For each deviation from a work practice that occurs, the Compliance report shall contain the information in Paragraphs (c)(1) through (4) of this section and the following information:

   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)]

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). A Compliance report submitted 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) including all required information concerning deviations from any limitation in this subpart shall 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 any deviations from the operational limitations, 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>Report Type</th>
<th>Report Contents</th>
<th>Reporting Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance report</td>
<td>If there are no deviations from any work or management practices that apply, a statement that there were no deviations from the work or management practices during the reporting period</td>
<td>Semi-annually according to the requirements in §63.6650(b)</td>
</tr>
<tr>
<td></td>
<td>If a deviation from any work or management practices occurred during the reporting period, the information in §63.6650(d)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If a malfunction occurred during the reporting period, the information in §63.6650(c)(4)</td>
<td></td>
</tr>
</tbody>
</table>

PERMIT CONDITION 004

Emission Units: 13, 16, 19, 20, 33, 36, and 37

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

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-13</td>
<td>M/L Recycle Feed Hopper</td>
</tr>
<tr>
<td>EP-16</td>
<td>48” Line Recycle Feed Hopper</td>
</tr>
<tr>
<td>EP-19</td>
<td>Polystyrene Storage Silo</td>
</tr>
<tr>
<td>EP-20</td>
<td>Recycle Storage Silo</td>
</tr>
<tr>
<td>EP-33</td>
<td>Polystyrene Storage Silo</td>
</tr>
<tr>
<td>EP-36</td>
<td>Polystyrene Hoppers</td>
</tr>
<tr>
<td>EP-37</td>
<td>Railcar &amp; Hopper Trucks</td>
</tr>
</tbody>
</table>

Emission Limitation:

1. The permittee shall not cause or permit to be discharged into the atmosphere from these emission sources any visible emissions with an opacity greater than 40 percent.
2. Exception: The permittee may discharge into the atmosphere from any source of emissions for a period aggregating not more than six minutes in any 60 minutes air contaminants with an opacity up to 40 percent.

**Monitoring:**
1. The permittee shall conduct opacity readings on these emission sources using the procedures contained in U.S. EPA 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 D, 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 E, 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 005
Emission Units: 6 and 7
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-06</td>
<td>M/L Polystyrene Feed Hoppers</td>
</tr>
<tr>
<td>EP-07</td>
<td>48&quot; Line Polystyrene Feed Hoppers</td>
</tr>
</tbody>
</table>

**Emission Limitation:**
1. The permittee shall not cause or permit to be discharged into the atmosphere from these emission sources any visible emissions with an opacity greater than 20 percent.
2. Exception: The permittee may discharge into the atmosphere from any source of emissions for a period aggregating not more than six minutes in any 60 minutes air contaminants with an opacity up to 40 percent.

**Monitoring:**
1. The permittee shall conduct opacity readings on these emission sources using the procedures contained in U.S. EPA 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 D, 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 E, 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 006

**Emission Units: 4, 5, 10, and 34**

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

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-04</td>
<td>M/L Baghouse</td>
</tr>
<tr>
<td>EP-05</td>
<td>48&quot; Line Baghouse</td>
</tr>
<tr>
<td>EP-10</td>
<td>Central Vacuum System</td>
</tr>
<tr>
<td>EP-34</td>
<td>Silo Fines Removal Baghouse</td>
</tr>
</tbody>
</table>

**Emission Limitation:**

1. The permittee shall not cause or permit to be discharged into the atmosphere from these emission sources any visible emissions with an opacity greater than 20 percent.

2. Exception: The permittee may discharge into the atmosphere from any source of emissions for a period aggregating not more than six minutes in any 60 minutes air contaminants with an opacity up to 40 percent.

**Monitoring:**

1. The permittee shall conduct opacity readings on these emission sources using the procedures contained in U.S. EPA 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.

4. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the permittee shall inspect the baghouses for leaks and wear.
**Recordkeeping:**
1. The permittee shall maintain records of all Method 22 observation results using Attachment D, 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 E, 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.

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**PERMIT CONDITION 007**  
EP-57 340 HP Diesel Emergency Fire Pump  
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-57</td>
<td>340 HP Diesel Emergency Fire Pump</td>
</tr>
</tbody>
</table>

**Emission Limitations:**
1. The permittee shall not cause or permit the emission into the atmosphere of any 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

<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-hr average not to be exceeded more than once per year</td>
</tr>
<tr>
<td></td>
<td>75 ppb</td>
<td>1-hr average; 3-yr average of the 99th percentile of the daily maximum 1-hr 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-hr 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-hr 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-hr 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-hr 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 0.05 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 008
Emission Units: 6, 7, 13, 16, 19, 20, 33, 34, 36, and 37

Emission Limitations:
1. The permittee shall not emit particulate matter in excess of:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Particulate Emission Limit (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-06</td>
<td>M/L Polystyrene Feed Hoppers</td>
<td>19.18</td>
</tr>
<tr>
<td>EP-07</td>
<td>48&quot; Line Polystyrene Feed Hoppers</td>
<td>19.18</td>
</tr>
<tr>
<td>EP-13</td>
<td>M/L Recycle Feed Hopper</td>
<td>7.58</td>
</tr>
<tr>
<td>EP-16</td>
<td>48&quot; Line Recycle Feed Hopper</td>
<td>7.58</td>
</tr>
<tr>
<td>EP-19</td>
<td>Polystyrene Storage Silo</td>
<td>19.18</td>
</tr>
<tr>
<td>EP-20</td>
<td>Recycle Storage Silo</td>
<td>19.18</td>
</tr>
<tr>
<td>EP-33</td>
<td>Polystyrene Storage Silo</td>
<td>19.18</td>
</tr>
<tr>
<td>EP-34</td>
<td>Silo Fines Removal Baghouse</td>
<td>35.43</td>
</tr>
<tr>
<td>EP-36</td>
<td>Polystyrene Hoppers</td>
<td>35.43</td>
</tr>
<tr>
<td>EP-37</td>
<td>Railcar &amp; Hopper Trucks</td>
<td>44.58</td>
</tr>
</tbody>
</table>

2. The permittee shall not cause, allow or permit the emission of particulate matter from any source in a concentration in excess of 0.30 grain per standard cubic foot of exhaust gases.

Monitoring/Recordkeeping:
1. The permittee shall maintain an operating and maintenance log for each emission unit 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;
   b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc; and
2. The permittee shall retain a copy of the manufacturer’s specifications.
3. Attachment B contains calculations documenting that the permittee is in compliance with the particulate matter emission limits without the aid of a control device.
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 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), the Code of State Regulations (CSR), and local ordinances 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, with the following exception:
      i) St. Louis metropolitan area. The open burning of household refuse is prohibited;
   b) Yard waste, with the following exception:
      i) St. Louis metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation is limited to the period beginning September 16 and ending April 14 of each calendar year and limited to a total base area not to exceed sixteen (16) square feet. Any open burning shall be conducted only between the hours of 10:00 a.m. and 4:00 p.m. and is limited to areas outside of incorporated municipalities;

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) Dow Chemical Co. - Riverside 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 Dow Chemical Co. - Riverside 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.


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 make such permit available to any Missouri Department of Natural Resources’ personnel upon request. [10 CSR 10-6.065(6)(C)3.B]

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 10-6.100 Alternate Emission Limits
Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the Department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

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 maintain the following monitoring schedule:
   a) The permittee shall conduct weekly observations for a minimum of eight consecutive weeks after permit issuance.
   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:**
The permittee shall document all readings on Attachment C, or its equivalent, noting the following:
1) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
2) Whether equipment malfunctions contributed to an exceedance.
3) Any violations and any corrective actions undertaken to correct the violation.

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### 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.

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### 10 CSR 10-5.040 Use of Fuel in Hand-Fired Equipment Prohibited

It shall be unlawful to operate any hand-fired fuel-burning equipment in the St. Louis, Missouri metropolitan area. This regulation shall apply to all fuel-burning equipment including, but not limited to, furnaces, heating and cooking stoves and hot water furnaces. It shall not apply to wood-burning fireplaces and wood-burning stoves in dwellings, nor to fires used for recreational purpose, nor to fires used solely for the preparation of food by barbecuing. Hand-fired fuel-burning equipment is any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.

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### 10 CSR 10-5.060 Refuse Not to be Burned in Fuel Burning Installations (Contained in State Implementation Plan)

No person shall burn or cause or permit the burning of refuse in any installation which is designed for the primary purpose of burning fuel.

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### 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 10-5.240 Additional Air Quality Control Measures May be Required When Sources Are Clustered in a Small Land Area

The Air Conservation Commission may prescribe more restrictive air quality control requirements that are more restrictive and more extensive than provided in regulations of general application for:
1) Areas in which there are one or more existing sources and/or proposed new sources of particulate matter in any circular area with a diameter of two miles (including sources outside metropolitan area) from which the sum of particulate emissions allowed from these sources by regulations of general application are or would be greater than 2000 tons per year or 500 pounds per hour.
2) Areas in which there are one or more existing sources and/or proposed new sources of sulfur dioxide in any circular area with a diameter of two miles from which the sum of sulfur dioxide emissions from these sources allowed by regulations of general application are or would be greater than 1000 tons for any consecutive three months or 1000 pounds per 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

<table>
<thead>
<tr>
<th>10 CSR 10-6.280 Compliance Monitoring Usage</th>
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<tbody>
<tr>
<td>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:</td>
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<tr>
<td>a) Monitoring methods outlined in 40 CFR Part 64;</td>
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<tr>
<td>b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, “Operating Permits”, and incorporated into an operating permit; and</td>
</tr>
<tr>
<td>c) Any other monitoring methods approved by the Director.</td>
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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.

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**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.

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**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.

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**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.I 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.A 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 William K. Alexander, Site Leader. 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; or

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>
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<td></td>
</tr>
</tbody>
</table>
Attachment B
10 CSR 10-6.400 Compliance Demonstration

This attachment may be used to demonstrate that the listed emission units are in compliance with 10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes.

The allowable PM emission limitation for sources having a process weight rate (P) of 30 ton/hr or less:

\[ E = 4.1(P)^{0.67} \]

The allowable PM emission limitation for sources having a process weight rate (P) of greater than 30 ton/hr:

\[ E = 55(P)^{0.11} - 40 \]

Potential PM Emission Rate = \( P \) (tons/hr) x PM Emission Factor (lb/ton)

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>P (ton/hr)</th>
<th>PM Emission Factor (lb/ton)</th>
<th>Potential PM Emission Rate (lb/hr)</th>
<th>PM Emission Rate Limit (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-06 M/L Polystyrene Feed Hoppers</td>
<td>10</td>
<td>0.2134</td>
<td>2.13</td>
<td>19.18</td>
</tr>
<tr>
<td>EP-07 48&quot; Line Polystyrene Feed Hoppers</td>
<td>10</td>
<td>0.2134</td>
<td>2.13</td>
<td>19.18</td>
</tr>
<tr>
<td>EP-13 M/L Recycle Feed Hopper</td>
<td>2.5</td>
<td>0.2134</td>
<td>0.53</td>
<td>7.58</td>
</tr>
<tr>
<td>EP-16 48&quot; Line Recycle Feed Hopper</td>
<td>2.5</td>
<td>0.2134</td>
<td>0.53</td>
<td>7.58</td>
</tr>
<tr>
<td>EP-19 Polystyrene Storage Silo</td>
<td>10</td>
<td>0.2134</td>
<td>2.13</td>
<td>19.18</td>
</tr>
<tr>
<td>EP-20 Recycle Storage Silo</td>
<td>10</td>
<td>0.2134</td>
<td>2.13</td>
<td>19.18</td>
</tr>
<tr>
<td>EP-33 Polystyrene Storage Silo</td>
<td>10</td>
<td>0.2134</td>
<td>2.13</td>
<td>19.18</td>
</tr>
<tr>
<td>EP-34 Silo Fines Removal Baghouse</td>
<td>25</td>
<td>0.0792</td>
<td>1.98</td>
<td>35.43</td>
</tr>
<tr>
<td>EP-36 Polystyrene Hoppers</td>
<td>25</td>
<td>0.2134</td>
<td>5.34</td>
<td>35.43</td>
</tr>
<tr>
<td>EP-37 Railcar &amp; Hopper Trucks</td>
<td>50</td>
<td>0.2134</td>
<td>10.67</td>
<td>44.58</td>
</tr>
</tbody>
</table>

The particulate emission factor for emission units 6, 7, 13, 16, 19, 20, 33, 36, and 37 is based upon stack testing results. During the stack testing 1,000 lbs of pellets were transferred and emitted 0.1067 lbs of particulate emissions. These emission units are in compliance with the limit without the aid of control device; therefore, 40 CFR Part 64 Compliance Assurance Monitoring is not applicable.

The particulate matter emission factor for EP-34 Silo Fines Removal Baghouse is based upon stack testing results. During the stack testing 40,800,000 lbs of pellets were transferred and emitted 1,600 lbs of particulate emissions. This emission unit is in compliance with the limit without the aid of a control device; therefore, 40 CFR Part 64 Compliance Assurance Monitoring is not applicable.
**Attachment C**

10 CSR 10-6.170 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>Yes⁴</td>
<td>Corrective Action</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Initial</td>
</tr>
</tbody>
</table>

⁴If there are visible emissions beyond the property boundary the permittee shall complete the excess emissions columns.
## Attachment D

10 CSR 10-6.220 Method 22 Observations

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Emission Source</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>
</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 E.
## Attachment E
10 CSR 10-6.220 Method 9 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>
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<tr>
<td>0</td>
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<td>18</td>
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</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 ________ % opacity.

Was the emission unit in compliance at the time of evaluation?  YES   NO  Signature of Observer
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.

- Part 70 Operating Permit Application, received March 18, 2011
- U.S. EPA’s Factor Information Retrieval (FIRE) Date System 6.25
- Construction Permit 0879-008, Issued August 1, 1979
- Construction Permit 0382-002, Issued March 18, 1982
- Construction Permit 0688-007, Issued June 20, 1988
- Construction Permit 0688-008, Issued March 29, 1988
- Construction Permit 1291-005, Issued December 9, 1991
- Construction Permit 0992-022, Issued September 21, 1992
- No Construction Permit Required Determination, Issued March 21, 2001
- No Construction Permit Required Determination, Issued August 8, 2005
- Construction Permit 122005-003, Issued December 6, 2005
- Construction Permit 122005-003A, Issued December 6, 2007
- Construction Permit 092008-009, Issued September 25, 2008
- Construction Permit 092008-009A, Issued November 7, 2008
- Construction Permit 092008-009B, Issued July 9, 2009
- No Construction Permit Required Determination, Issued February 5, 2010
- No Construction Permit Required Determination, Issued May 25, 2011

Other Air Regulations Determined Not to Apply to the Operating Permit

10 CSR 10-5.410 *Control of Emissions From Manufacture of Polystyrene Resin* is not applicable to the installation and has not been included within this permit. This regulation is applicable to installations engaged in the manufacture of polystyrene resin. [10 CSR 10-5.410(1)(B)] The permittee no longer produces polystyrene. The permittee purchases polystyrene.

10 CSR 10-5.500 *Control of Emissions From Volatile Organic Liquid Storage* is not applicable to the installation and has not been included within this permit. This regulation is applicable to tanks with a capacity of 40,000 gallons or larger. [10 CSR 10-5.550(1)(B)] All of the tanks at the installation (EP-44 134a Tank, EP-45 Empty Tank, and EP-64 R-152a Tank) are only 30,000 gallons in capacity.

10 CSR 10-5.510 *Control of Emissions of Nitrogen Oxides* is not applicable to the installation and has not been applied within this permit. This regulation is applicable to major sources of NOx. [10 CSR 10-5.510(1)(A)] The permittee is a minor source of NOx with potential emissions of 17.05 tons/yr.

10 CSR 10-5.520 *Control of Volatile Organic Compound Emissions From Existing Major Sources* is not applicable to the installation and has not been included within this permit. This regulation is applicable
to major sources of VOCs. [10 CSR 10-5.520(1)] The permittee is a minor source of VOC with potential emissions of 29.01 ton/yr.

10 CSR 10-5.570 Control of Sulfur Emissions From Stationary Boilers is not applicable to the installation and has not been included with this permit. This regulation is applicable to boilers and process heaters with a capacity of 50 MMBtu/hr or greater. [10 CSR 10-5.570(1)(A)] Each of the boilers (EP-27C Boiler #1 East and EP-27D Boiler #2 West) at the installation is rated at 4.185 MMBtu/hr and EP-58 Space Heaters has a total capacity of 22.71 MMBtu/hr.

10 CSR 10-6.405 Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used For Indirect Heating is not applicable to the installation and has not been applied within this permit. 10 CSR 10-6.405(1)(E) exempts installations which exclusively combust natural gas.

Construction Permits

Construction Permit 0879-008, Issued August 1, 1979:
- This de minimis construction permit is for an expansion to the SAN process and the construction of the ABS process and polystyrene feedstock plant.
- This construction permit contains no special conditions.

Construction Permit 0382-002, Issued March 18, 1982:
- This de minimis construction permit is for the installation of a 200 HP natural gas fired steam generator.
- This construction permit contains no special conditions.

Construction Permit 0688-007, Issued June 20, 1988:
- This de minimis construction permit is for the installation of a zinc stearate additive system.
- This construction permit contains no special conditions.

Construction Permit 0688-008, Issued March 29, 1988:
- This de minimis construction permit is for the installation of a 30,000 gallon methyl chloride storage tank.
- This construction permit contains no special conditions.

Construction Permit 1291-005, Issued December 9, 1991:
- This de minimis construction permit is for the replacement of a 300 HP extruder motor and gearbox with a 500 HP motor and a 600 HP gearbox.
- Special Conditions 1-3 contain a 481 tons VOC per emission limit and supporting monitoring and recordkeeping. These conditions have not been applied within this permit. The permittee has switched blowing agents and removed their polystyrene since this special condition was applied, reducing the plantwide potential emissions of VOC to 29.01 ton/yr.

Construction Permit 0992-022, Issued September 21, 1992:
- This de minimis construction permit is for the combustion of polystyrene vapor within an existing boiler.
- This construction permit contains no special conditions.
No Construction Permit Required Determination, Issued March 21, 2001:
• This no construction permit required determination is to increase production and switch to a non-VOC blowing agent.

No Construction Permit Required Determination, Issued August 8, 2005:
• This no construction permit required determination is for the replacement of one water-based ink with another water-based ink for the logo printing on the extruded polystyrene production line.

Construction Permit 122005-003, Issued December 6, 2005:
Construction Permit 122005-003A, Issued December 6, 2007:
• This temporary construction permit allowed the installation to test alternative blowing agents.
• Construction Permit 122005-003 expired December 6, 2007.
• Construction Permit 122005-003A extended the effective period to December 6, 2008.

Construction Permit 092008-009, Issued September 25, 2008:
Construction Permit 092008-009A, Issued November 7, 2008:
Construction Permit 092008-009B, Issued July 9, 2009:
• This de minimis construction permit allows the installation to switch to a different blowing agent.
• Special Condition 1 has been applied within this permit (see Permit Condition 001).

No Construction Permit Required Determination, Issued February 5, 2010:
• This no construction permit required determination is for the installation of a vacuum oven cleaner to remove hardened polymer from production equipment parts.

No Construction Permit Required Determination, Issued May 25, 2011:
• This no construction permit required determination allows the installation to transfer HFC-134a from EP-44 134a Tank or rail cars directly into tank trucks using truck mounted unloading equipment.

New Source Performance Standards (NSPS) Applicability

40 CFR Part 60, Subparts D, Da, Db, and Dc – 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. [§60.40(a) and §60.40a(a)] Subpart Db is only applicable to steam generating units with a heat input rate greater than 100 MMBtu/hr. [§60.40b(a)] Subpart Dc is only applicable to steam generating units with a heat input rate greater than 10 MMBtu/hr. [§60.40c(a)] EP-27C Boiler #1 East and EP-27D Boiler #2 West are each rated at 4.185 MMBtu/hr. EP-58 Space Heaters does have a total heat input of 22.71 MMBtu/hr; however, this emission point is made up of multiple space heaters each below 10 MMBtu/hr.

40 CFR Part 60, Subparts K and Ka – Standards of Performance for Storage Vessels for Petroleum Liquids 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)] EP-44 134a Tank, EP-45 Empty Tank, and EP-64 R-152a Tank are each 30,000 gallons in capacity.
40 CFR Part 60, Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels* are not applicable to the installation and have not been applied within this permit. 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)] EP-44 134a Tank, EP-45 Empty Tank, and EP-64 R-152a Tank are each 30,000 gallons in capacity; however, none of the tanks contain a volatile organic liquid. §60.111b defines *volatile organic liquid* as “any organic liquid which can emit volatile organic compounds (as defined in 40 CFR 51.100) into the atmosphere.”

40 CFR Part 60, Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* is not applicable to the installation and has not been applied within this permit. This regulation applies to owners and operators of stationary CI ICE that were constructed after July 11, 2005. [§60.4200(a)(2)] EP-57 340 HP Diesel Emergency Fire Pump was installed at the installation in 1995.

40 CFR Part 60, Subpart JJJJ – *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines* is applicable to the installation and has been applied within this permit (see Permit Condition 002).

**Maximum Achievable Control Technology (MACT) Applicability**

40 CFR Part 63, Subpart ZZZZ – *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines* is applicable to the installation and has been applied within this permit (see Permit Condition 003). EP-63 115 HP Natural Gas Emergency Generator is subject to this regulation; however, the only requirement is §63.6590(c) which requires new stationary RICE located at an area source to meet the requirements of this part by meeting the requirements of 40 CFR Part 60, Subpart JJJJ for spark ignition engines. No further requirements apply to EP-63 under this part. 40 CFR Part 60, Subpart JJJJ has been applied to EP-63 in Permit Condition 002.

40 CFR Part 63, Subpart JJJJJJ – *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* is not applicable to the installation and has not been applied within this permit. This regulation applies to industrial boilers combusting coal, biomass, or oil at an area source of HAPs. [§63.11194(a)] All of the installation’s boilers combust natural gas.

**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 not applicable to the installation and has not been applied within this permit. EP-10 Central Vacuum System is required to operate and maintain a baghouse to comply with 10 CSR 10-6.400 *Restriction of Emission of Particulate Matter from Industrial Processes*; however, potential uncontrolled emissions from EP-10 were below the major source threshold.

### Greenhouse Gas Emissions

On May 13, 2010, EPA issued the GHG Tailoring Rule which set the major source threshold for CO$_2$e 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 (CO$_2$e) for this installation are calculated to be 873,008.80 tons, classifying the installation as a major source of GHGs. There are no further requirements for CO$_2$e emissions at this time. 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, the preamble of the GHG Reporting Rule clarifies that Part 98 requirements do not have to be incorporated in Part 70 permits operating permits at this time. In addition, Missouri regulations do not require the installation to report CO$_2$ emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation’s actual CO$_2$ emissions were not included within this permit. The applicant is required to report actual CO$_2$ 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 004, 005, and 006). The regulation is applicable to the following visible emission sources; however, as potential particulate emissions from these sources is less than 0.5 lb/hr they are assumed to be in compliance and have no monitoring/recordkeeping/reporting at this time:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Process SCC</th>
<th>MHDR (ton/hr)</th>
<th>PM$_{10}$ Emission Factor (lb/ton)</th>
<th>PTE (lb/hr)</th>
<th>(MMscf/hr)</th>
<th>(lb/MMscf)</th>
<th>(lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-01</td>
<td>M/L Additive Feed Hoppers</td>
<td>30101811</td>
<td>0.5</td>
<td>0.217</td>
<td>0.11</td>
<td>0.004185</td>
<td>7.6</td>
<td>0.03</td>
</tr>
<tr>
<td>EP-02</td>
<td>M/L Reclaim Feed Vent</td>
<td>30101821</td>
<td>0.75</td>
<td>0.217</td>
<td>0.16</td>
<td>0.004185</td>
<td>7.6</td>
<td>0.03</td>
</tr>
<tr>
<td>EP-03</td>
<td>48” Line Additive Feed Hopper</td>
<td>30101811</td>
<td>0.5</td>
<td>0.217</td>
<td>0.11</td>
<td>0.004185</td>
<td>7.6</td>
<td>0.03</td>
</tr>
</tbody>
</table>

EP-27C Boiler #1 East 10200602 0.004185 7.6 0.03
EP-27D Boiler #2 West 10200602 0.004185 7.6 0.03
EP-58 Space Heaters 10500106 0.02271 8.7 0.20

10 CSR 10-6.260 *Restriction of Emission of Sulfur Compounds* is applicable to the installation and has been applied within this permit (see Permit Condition 007). EP-27C Boiler #1 East, EP-27D Boiler #2 West, EP-58 Space Heaters, and EP-63 115 HP Natural Gas Emergency Generator are exempt from this regulation as combustion equipment using exclusively pipeline grade natural gas per 10 CSR 10-6.260(1)(A)2.

10 CSR 10-6.400 *Restriction of Emission of Particulate Matter from Industrial Processes* is applicable to the installation and has been applied within this permit (see Permit Condition 008).

- EP-57 340 HP Diesel Emergency Fire Pump and EP-63 115 HP Natural Gas Emergency Generator are not subject to this regulation as liquids and gases used solely as combustion fuels are excluded from the definition of process weight within 10 CSR 10-6.400(2)(A).
- EP-04 M/L Baghouse and EP-05 48” Line Baghouse are exempt from this regulation as they have a federally enforceable requirement (Permit Condition 001) requiring installation, operation, and maintenance of a particulate matter control device system with at least 90 percent control per 10 CSR 10-6.400(1)(B)15.
- EP-10 Central Vacuum System is exempt from this regulation per 10 CSR 10-6.400(1)(B)8 as the system meets a construction permit exemption under 10 CSR 10-6.061(3)(B)5.A:
  - “Plant maintenance, and upkeep activities such as routine cleaning, janitorial services, use of janitorial products, grounds keeping, general repairs, architectural or maintenance painting, welding repairs, plumbing, roof repair, installing insulation, using air compressors and pneumatically operated equipment, and paving parking lots, provided these activities are not conducted as part of the installation’s primary business activity”
- The following emission units are exempt from this regulation per 10 CSR 10-6.400(1)(B)12 as they have potential particulate emissions at maximum design capacity of less than 0.5 lb/hr:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Process SCC</th>
<th>MHDR (ton/hr)</th>
<th>PM$_{10}$ Emission Factor (lb/ton)</th>
<th>PTE (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-01</td>
<td>M/L Additive Feed Hoppers</td>
<td>30101811</td>
<td>0.5</td>
<td>0.217</td>
<td>0.11</td>
</tr>
<tr>
<td>EP-02</td>
<td>M/L Reclaim Feed Vent</td>
<td>30101821</td>
<td>0.75</td>
<td>0.217</td>
<td>0.16</td>
</tr>
<tr>
<td>EP-03</td>
<td>48” Line Additive Feed Hopper</td>
<td>30101811</td>
<td>0.5</td>
<td>0.217</td>
<td>0.11</td>
</tr>
</tbody>
</table>

EP-62 M/L Polystyrene Feed Hopper has been combined with EP-06 M/L Polystyrene Feed Hopper under EP-06 per the installation’s request. As EP-62 is a new source under 10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants*, the newly combined EP-06 is subject to a 20 percent opacity standard.

EP-61 48” Line Polystyrene Feed Hopper has been combined with EP-07 48” Line Polystyrene Feed Hopper under EP-07 per the installation’s request.
The determinations made with this operating permit are based upon the following plant wide potential emissions:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Potential to Emit (ton/yr)$^1$</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>6.38</td>
</tr>
<tr>
<td>CO$_2$e</td>
<td>873,008.80</td>
</tr>
<tr>
<td>NH$_3$</td>
<td>1.92</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>17.05</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>135.35</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>1.34</td>
</tr>
<tr>
<td>SO$_x$</td>
<td>0.25</td>
</tr>
<tr>
<td>VOC</td>
<td>29.01</td>
</tr>
<tr>
<td>HAP</td>
<td>3.28</td>
</tr>
<tr>
<td>Styrene (100-42-5)</td>
<td>1.91</td>
</tr>
<tr>
<td>Ethylbenzene (100-41-4)</td>
<td>1.04</td>
</tr>
<tr>
<td>Xylene (1330-20-7)</td>
<td>0.12</td>
</tr>
<tr>
<td>Hexane (110-54-3)</td>
<td>0.07</td>
</tr>
<tr>
<td>Acrylonitrile (107-13-1)</td>
<td>0.05</td>
</tr>
<tr>
<td>Toluene (108-88-3)</td>
<td>0.05</td>
</tr>
<tr>
<td>Dibutyl Phthalate (84-74-2)</td>
<td>0.02</td>
</tr>
<tr>
<td>Formaldehyde (50-00-0)</td>
<td>0.01</td>
</tr>
</tbody>
</table>

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

- Potential emissions from EP-57 340 HP Diesel Emergency Fire Pump and EP-63 115 HP Natural Gas Emergency Generator were evaluated at 500 hours of uncontrolled annual operation per EPA guidance document *Calculating Potential to Emit (PTE) for Emergency Generators* (dated September 6, 1995).
- EP-04 and EP-05 were given 99 percent PM$_{10}$ control efficiency for baghouses required by Permit Condition 001.

**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
MEMORANDUM

DATE: November 18, 2011

TO: 2011-08-030, Dow Chemical Co. - Riverside (099-0014)

FROM: Alana L. Rugen, Environmental Engineer II

SUBJECT: Response to Public Comments

The draft Part 70 Operating Permit for Dow Chemical Co. - Riverside (Project #2011-08-030, County-Plant ID: 099-0014) was placed on public notice as of October 19, 2011, for a 30-day comment period. The public notice was published on the Department’s web page at: http://www.dnr.mo.gov/env/apcp/PermitPublicNotices.htm on Wednesday, October 19, 2011. The Air Pollution Control Program did not receive any comments from either the public or the applicant during the 30-day comment period.

ALR/kjc
Mr. William K. Alexander  
Dow Chemical Co. - Riverside  
500 Dow Industrial Dr.  
Pevely, MO 63070  

Re: Dow Chemical Co. - Riverside, 099-0014  
Permit Number: OP2011-061  

Dear Mr. Alexander:

Enclosed with this letter is your 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.

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: St. Louis Regional Office  
PAMS File: 2011-08-030