INTERMEDIATE STATE
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.

Intermediate Operating Permit Number: OP2018-042
Expiration Date: MAY 17 2023
Installation ID: 189-0020
Project Number: 2015-04-015

Installation Name and Address
Monsanto Company
800 North Lindbergh Blvd.
St. Louis, MO 63167
St. Louis County

Parent Company's Name and Address
Monsanto Company
800 North Lindbergh Blvd.
St. Louis, MO 63167

Installation Description:
Monsanto Company is an agricultural research and development installation. The installation operates several emergency generators onsite. The emergency generators are used during emergency situations, for periodic testing and maintenance of the generators. The majority of the facility’s emissions are from the natural gas boilers, which are equipped to run on fuel oil as a back-up.

The installation has the potential to emit nitrogen oxides (NOₓ) above the major source thresholds; however, the installation has accepted voluntary, federally enforceable emission limitations limiting NOₓ emissions to less than major source levels to qualify for this permit.

Prepared by: Berhanu A. Getahun
Operating Permit Unit

Director or Designee
Department of Natural Resources

MAY 17 2018
Effective Date
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# I. Installation Equipment Listing

**EMISSION UNITS WITH LIMITATIONS**
The following list provides a description of the equipment at this installation which emits air pollutants and identified as having unit-specific emission limitations.

<table>
<thead>
<tr>
<th>Emission Unit #</th>
<th>Description of Emission Unit</th>
<th>Year Installed or Modified</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Boilers (EP-001)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU0010</td>
<td>Boiler #2 (Cleaver Brooks: Model No. W3688)</td>
<td>1992</td>
</tr>
<tr>
<td>EU0020</td>
<td>Boiler #3 (Cleaver Brooks: Model No. WG303)</td>
<td>1996</td>
</tr>
<tr>
<td>EU0030</td>
<td>Boiler #4 (Cleaver Brooks: Model No. WG395)</td>
<td>1999</td>
</tr>
<tr>
<td>EU0040</td>
<td>Boiler #5 (Cleaver Brooks: Model No. W3474)</td>
<td>1988</td>
</tr>
<tr>
<td><strong>Emergency Stationary Reciprocating Internal Combustion Diesel Engines (EP-005)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU0050</td>
<td>2.25 Megawatt (MW) Emergency Generator – Building J</td>
<td>2007</td>
</tr>
<tr>
<td>EU0060</td>
<td>80 Kilowatt (KW) Emergency Generator – Building U (U414)</td>
<td>2011</td>
</tr>
<tr>
<td>EU0070</td>
<td>300 KW Emergency Generator V-Annex</td>
<td>2011</td>
</tr>
<tr>
<td>EU0080</td>
<td>125 KW Emergency Generator – Warson Fire Pump</td>
<td>2008</td>
</tr>
<tr>
<td>EU0090</td>
<td>500 KW Emergency Generator - Building N</td>
<td>2000</td>
</tr>
<tr>
<td>EU0100</td>
<td>1.25 MW Emergency Generator – Building G-Annex #1</td>
<td>1997</td>
</tr>
<tr>
<td>EU0110</td>
<td>1.25 MW Emergency Generator – G-Annex #2</td>
<td>1997</td>
</tr>
<tr>
<td>EU0120</td>
<td>1.25 MW Emergency Generator – G-Annex #3</td>
<td>1997</td>
</tr>
<tr>
<td>EU0130</td>
<td>125 KW Emergency Generator – Building B</td>
<td>2015</td>
</tr>
<tr>
<td>EU0140</td>
<td>250 KW Emergency Generator – Building Z/#2</td>
<td>2005</td>
</tr>
<tr>
<td>EU0150</td>
<td>250 KW Emergency Generator – Nidus Building</td>
<td>2002</td>
</tr>
</tbody>
</table>
II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect on the date of permit issuance. The plant wide conditions apply to all emission units at this installation. All emission units are listed in Section I under Emission Units with Limitations and Emission Units without Limitations.

PERMIT CONDITION PW001

10 CSR 10-6.020(2)(I)23. and 10 CSR 10-6.065(5)(C)2. Voluntary Limitation(s)

Emission Limitation:
The permittee shall emit less than 100 tons of Nitrogen Oxides (NOx) from the entire installation in any consecutive 12-month period. This total shall include but not be limited to the following sources:

- Boilers; and
- Stationary Internal Combustion Engines

Monitoring/Record Keeping:
1) The permittee shall record the monthly total of NOx emissions and the most recent consecutive 12-month totals in tons using Attachment A or equivalent forms to demonstrate compliance with the NOx emission limitation of this permit condition.
2) The permittee shall maintain all records required by this permit condition for not less than five years and make available to the St. Louis County Department of Health (SLCDH) or Missouri Department of Natural Resources' personnel upon request.

Reporting:
1) The permittee shall report to the SLCDH Air Pollution Control Program, 6121 North Hanley Road, Berkeley, Missouri 63134 (or current address), and the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov., no later than ten (10) days after the end of the month during which any record required by this permit condition shows an exceedance of a limitation imposed by this permit condition.
2) Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted annually in the annual compliance certification and monitoring report, as required by Section V of this permit.
EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS
The following list provides a description of the equipment, which does not have unit specific limitations at the time of permit issuance.

Description of Emission Source

Five (5) Emergency Stationary Reciprocating Internal Combustion Natural Gas Engines
- 15 KW Emergency Generator – Building R, Year Installed: 2005
- 15 KW Emergency Generator – Building U, Year Installed: 2005
- 150 KW Emergency Generator – Building W, Year Installed: 2002
- 65 KW Emergency Generator – Nidus Fire Pump, Year Installed: 1999


Three (3) No. 2 Fuel Oil Storage Tanks:
- Two – 30,000 Gallon Underground Storage Tanks and
- One – 20,000 Gallon Aboveground Storage Tank.

Aqueous Parts Washer (with Non-VOC Washer Solution).
Facility-wide hoods, laboratory exhausts, waste storage area, and solvent storage cabinet/room vents.
Maintenance Paint Booth.
Grind Booths.
Cell Exhausets.
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 on the date of permit issuance.

### EU0010 through EU0040 - Boilers

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Manufacturer/Model #</th>
<th>2016 EIQ Reference #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU0020</td>
<td>Boiler #3 – 40 MMBtu/hr natural gas-fired low NO\textsubscript{X} burner water tube boiler with distillate fuel oil as a back-up fuel. (Installed – 1996)</td>
<td>Cleaver-Brooks/ WG303</td>
<td></td>
</tr>
<tr>
<td>EU0030</td>
<td>Boiler #4 – 54 MMBtu/hr natural gas-fired low NO\textsubscript{X} burner water tube boiler with distillate fuel oil as a back-up fuel. (Installed – 1999)</td>
<td>Cleaver-Brooks/ WG395</td>
<td></td>
</tr>
<tr>
<td>EU0040</td>
<td>Boiler #5 – 85 MMBtu/hr natural gas-fired water tube boiler with distillate fuel oil as a back-up fuel. (Installed – 1988)</td>
<td>Cleaver-Brooks/ W3474</td>
<td></td>
</tr>
</tbody>
</table>

### Permit Condition (EU0010 through EU0040) - 001

10 CSR 10-6.020(2)(l)23 and 10 CSR 10-6.065(5)(C)2 Voluntary Limitation(s)
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
40 CFR Part 63, Subpart JJJJJJ – National Emission Standards for HAP for Industrial, Commercial, and Institutional Boilers Area Sources

**Applicability:**
The types of boilers in §63.11195(e) are not subject to 40 CFR Part 63, Subpart JJJJJJ: [§63.11195](#)

1) A gas-fired boiler as defined in §63.11237. [§63.11195(e)]

**Operational Limitation:**
The gas-fired boilers shall burn natural gas not combined within any solid fuels and burn fuel oil No. 2 only during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on fuel oil No. 2. Periodic testing, maintenance, or operator training on fuel oil No. 2 shall not exceed a combined total of 48 hours during any calendar year.

**Monitoring/Record Keeping:**
1) The permittee shall maintain an accurate record of the number of hours fuel oil #2 is combusted each year.
2) Record keeping shall be accomplished in accordance with the requirements of 10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements, as stated in Section V of this permit.
**Reporting:**
The permittee shall report to the SLCDH Air Pollution Control Program, 6121 North Hanley Road, Berkeley, Missouri 63134, and the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov., no later than ten (10) days after any exceedance or deviation from this permit condition. Any deviations from this permit condition shall also be reported in the annual compliance certification, as required by Section V of this permit.

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**Permit Condition (EU0010 through EU0030) - 002**

10 CSR 10-6.070 New Source Performance Regulations
40 CFR Part 60 Subpart De
Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

**Emission Limitation:**
Standard for sulfur dioxide:
1) The permittee shall not emit gases that contain Sulfur dioxide (SO$_2$) in excess of 215 nanograms per joule (ng/J) (0.50 lb/mmBtu) heat input; as an alternative, no oil shall be combusted that contains greater than one-half percent (0.5%) by weight sulfur. [§60.42c (d)]
2) For distillate oil-fired boilers, compliance with the emission limits or fuel oil sulfur limits may be determined based on a certification from the fuel supplier, as described under §60.48c(f)(1). [§60.42c (h) & (h)(1)]
3) The fuel oil sulfur limits apply at all times, including periods of startup, shutdown, and malfunction. [§60.42c (i)]

**Monitoring:**
For affected facilities subject to §60.42c (h)(1) where the permittee seeks to demonstrate compliance with the SO$_2$ standards based on fuel supplier certification, the monitoring shall consist of the certification from the fuel supplier, as described in §60.48c(f), as applicable. [§60.46c (e)]

**Record Keeping:**
1) For distillate oil: Records of fuel supplier certification.
   - The Fuel Supplier Certification shall include the name of the oil supplier; and a statement from the oil supplier that the oil complies with the specifications for distillate oil (Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96, or 98 “Standard Specification for Fuel Oils”). [§60.48c(f)(1) & §60.41c – Definition]
2) The permittee shall record and maintain records of the amounts of each fuel combusted during each calendar month. If the affected facility only burns very low sulfur fuel oil or other liquid or gaseous fuels with potential sulfur dioxide emissions rate of 140 ng/J (0.32 lb/MMBtu) heat input or less, the permittee shall record and maintain records of the fuels combusted during each calendar month. [§60.48c(g)(2)]
3) The permittee shall keep record of the sulfur content or maximum sulfur content of the fuel oil.
4) Record keeping shall be accomplished in accordance with the requirements of 10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements, as stated in Section V of this permit.

**Reporting:**
1) The permittee shall keep records and submit reports as required under paragraph (d) of §60.48c, including the following information, as applicable. [§60.48c(e)]
a) Calendar dates covered in the reporting period. [§60.48c(e)(1)]
b) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1) of §60.48c, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period. [§60.48c(e)(11)]

2) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Director and shall be postmarked by the 30th day following the end of the reporting period. [§60.48c(j)]

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**Permit Condition (EU0010 through EU0030) - 003**

10 CSR 10-6.070 New Source Performance Regulations
40 CFR Part 60 Subpart Dc
Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

**Emission Limitation:**
Standard for particulate matter:

1) The permittee shall not cause to be discharged into the atmosphere from Boiler #2 (EU0010), Boiler #3 (EU0020) and Boiler #4 (EU0030) any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. [§60.43c(c)]

2) The opacity standards under §60.43c apply at all times, except during periods of startup, shutdown, or malfunction. [§60.43c(d)]

**Monitoring:**

1) The permittee shall conduct visible emissions readings on these stacks using the procedures contained in U.S. EPA Test Method 22. Each Method 22 observation shall be conducted for a minimum of six-minutes. For the dual fuel boilers (i.e., natural gas/fuel oil #2), visible emission readings are required when the boilers are operating on fuel oil #2 and when the weather conditions allow. If no visible emissions are observed using Method 22, then no further observations would be required.

2) For the boilers stacks with visible emissions, the permittee representative would then conduct a Method 9 opacity observation. The permittee may choose to forego Method 22 observations and instead begin with a Method 9 opacity observation. Each Method 9 opacity observation shall be conducted for a minimum of 30-minutes.

3) 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:
      i) Observations shall be made 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:
         ii) Observations shall be made once per month. If a violation is noted, monitoring reverts to weekly.

4) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.
Record Keeping:
1) The permittee shall maintain records of all observation results (see Attachments B and C or equivalent forms), noting:
   a) Whether any air emissions (except for water vapor) were visible from the stacks and
   b) All stacks from which visible emissions occurred.
2) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
3) All records shall be maintained for five years.

Reporting:
1) The permittee shall report to the SLCDH Air Pollution Control Program, 6121 North Hanley Road, Berkeley, Missouri 63134, and the Air Pollution Control Program's Compliance/Enforcement Section at P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, no later than ten days after an exceedance of the emission limitation.
2) The permittee shall report any deviations/exceedances of this permit condition using the annual monitoring report and annual compliance certification as required by Section V of this permit.

<table>
<thead>
<tr>
<th>Permit Condition (EU0010) - 004</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 CSR 10-6.060 Construction Permits Required</td>
</tr>
<tr>
<td>SLCDH Air Pollution Control Program Construction Permit #5873</td>
</tr>
</tbody>
</table>

Emission Limitation:
Boiler #2 (EU0010) Fuel oil usage is limited to 1,000,000 gallons of fuel oil No. 2 per 12-month rolling period containing one-half percent (0.5%) by weight sulfur or a greater number of gallons at a lower sulfur content, based on certification and approval by the Program Manager.

Monitoring/Record Keeping:
1) The permittee shall maintain monthly records of fuel oil usage onsite.
2) The permittee shall maintain certification demonstrating fuel oil sulfur content onsite for each shipment of fuel oil received.
3) Records demonstrating compliance with emission limitations shall be completed within ten (10) days of the end of each calendar month.
4) The permittee shall retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:
1) The permittee shall report to the SLCDH Air Pollution Control Program, 6121 North Hanley Road, Berkeley, Missouri 63134, and the Air Pollution Control Program's Compliance/Enforcement Section at P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, no later than thirty (30) days after the discovery of an exceedance of the emission limitation.
2) The permittee shall report any deviations/exceedances of this permit condition using the annual monitoring report and annual compliance certification as required by Section V of this permit.
Permit Condition (EU0030) - 004

10 CSR 10-6.060 Construction Permits Required
SLCDH Air Pollution Control Program Construction Permit #6322

Emission Limitation:
Boiler #4 (EU003) Fuel oil usage is limited to 2,500,000 gallons of fuel oil No. 2 per 12-month rolling period containing one-half percent (0.5%) by weight sulfur or a greater number of gallons at a lower sulfur content, based on certification and approval by the Program Manager.

Monitoring/Record Keeping:
1) The permittee shall maintain monthly records of fuel oil usage onsite.
2) The permittee shall maintain certification demonstrating fuel oil sulfur content onsite for each shipment of fuel oil received.
3) Records demonstrating compliance with emission limitations shall be completed within ten (10) days of the end of each calendar month.
4) The permittee shall retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:
1) The permittee shall report to the SLCDH Air Pollution Control Program, 6121 North Hanley Road, Berkeley, Missouri 63134, and the Air Pollution Control Program's Compliance/Enforcement Section at P.O. Box 176, Jefferson City, MO 65102, or AirComplianceReporting@dnr.mo.gov, no later than thirty (30) days after the discovery of an exceedance of the emission limitation.
2) The permittee shall report any deviations/exceedances of this permit condition using the annual monitoring report and annual compliance certification as required by Section V of this permit.

Permit Condition (EU0040) - 002

10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds¹
10 CSR 10-6.261 Control of Sulfur Dioxide Emissions

Operational Limitation:
1) The permittee shall not burn or permit the burning of any fuel oil containing more than two percent sulfur (2%) by weight for the months of October through March and four percent (4%) for the remaining months of the year. [10 CSR 10-6.260(3)(B)3.B.(I) and 10 CSR 10-6.261(3)(B)2.B.(1)]
2) The permittee must determine compliance with the fuel sulfur content limitation of this permit condition as follows:
   a) Fuel delivery records; or
   b) Fuel sampling and analysis; or
   c) Fuel oil supplier certification may be used as an alternate method of compliance.

¹ 10 CSR 10-6.260 was rescinded on November 30, 2015 and replaced by 10 CSR 10-6.261; however, the provisions of 10 CSR 10-6.260 currently remain in State Implementation Plan. The provisions of 10 CSR 10-6.260 will expire, once 10 CSR 10-6.261 is incorporated into the federally-approved SIP as a final EPA action.
Record Keeping:
1) The permittee must maintain fuel delivery/purchase receipts and/or fuel sampling tests.
2) The permittee must also maintain the fuel supplier certification information to certify all fuel deliveries. Bills of lading and/or other fuel delivery documentation containing the following information for all fuel purchases or deliveries are deemed acceptable to comply with the requirements of this rule:
   a) The name, address, and contact information of the fuel supplier;
   b) The type of fuel (diesel or #2 fuel oil);
   c) The sulfur content or maximum sulfur content expressed in percent sulfur by weight or in ppm sulfur; and
   d) The heating value of the fuel.
3) The permittee must use fuel sampling and analysis to determine sulfur weight percent, or equivalent, of fuel(s) in accordance with 10 CSR 10-6.040. This requirement does not apply if the permittee uses the fuel supplier certification as a method of compliance.
4) The permittee must retain all reports and records on-site for a minimum of five (5) years and make available within five (5) business days upon written or electronic request by the Director.

Reporting:
1) The permittee must furnish the Director all data necessary to determine compliance status.
2) The permittee shall report any excess emissions other than startup, shutdown, and malfunction excess emissions already required to be reported under 10 CSR 10-6.050 to the Director for each calendar quarter within thirty (30) days following the end of the quarter. In all cases, the notification must be written and include the information listed in 10 CSR 10-6.261 (4) (A) 1.
3) The permittee shall report any deviations/exceedances of this permit condition using the annual monitoring report and annual compliance certification as required by Section V of this permit.

Permit Condition (EU0040) - 003

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

Emission Limitation:
1) The permittee shall not cause or permit emissions to be discharged into the atmosphere from any source in the St. Louis metropolitan area any visible emissions with an opacity greater than 20%. [10 CSR 10-6.220(3)(A)1]
2) Exception: The permittee may discharge into the atmosphere from any source of emissions for a period(s) not aggregating more than one (1) six (6) minute period in any 60 minutes air contaminants with an opacity up to 40%. [10 CSR 10-6.220(3)(A)2]
3) Failure to demonstrate compliance with 10 CSR 10-6.220(3)(A) solely because of the presences of uncombined water shall not be a violation. [10 CSR 10-6.220(3)(B)]

Monitoring:
1) The permittee shall conduct visible emissions readings on the boiler stack using the procedures contained in U.S. EPA Test Method 22. Each Method 22 observation shall be conducted for a minimum of six-minutes. Visible emission readings are required when the boiler is operating on fuel oil #2 and when the weather conditions allow. If no visible emissions are observed using Method 22, then no further observations would be required.
2) If visible emissions are perceived, the permittee representative would then conduct a Method 9 opacity observation. The permittee may choose to forego Method 22 observations and instead begin
with a Method 9 opacity observation. Each Method 9 opacity observation shall be conducted for a minimum of 30-minutes.

3) The following monitoring schedule must 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:
      i) Observations shall be made 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:
         ii) Observations shall be made once per month. If a violation is noted, monitoring reverts to weekly.

4) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

Record Keeping:
1) The permittee shall maintain records of all observation results (see Attachments B and C or equivalent forms), noting:
   a) Whether any air emissions (except for water vapor) were visible from the stacks and
   b) All stacks from which visible emissions occurred.
2) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
3) All records shall be maintained for five years.

Reporting:
1) The permittee shall report to the SLCDH Air Pollution Control Program, 6121 North Hanley Road, Berkeley, Missouri 63134, and the Air Pollution Control Program's Compliance/Enforcement Section at P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, no later than ten days after an exceedance of the emission limitation.
2) The permittee shall report any deviations/exceedances of this permit condition using the annual monitoring report and annual compliance certification as required by Section V of this permit.

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Description</th>
<th>Manufacturer/Model #</th>
<th>2016 EIQ Reference #</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU0050</td>
<td>2.25 MW Emergency Generator – Building J 3,251 Horsepower (HP) diesel engine with a displacement of 3.75 liters per cylinder (Construction Date – January 2007)</td>
<td>Cummins/QSK-60-G9</td>
<td></td>
</tr>
<tr>
<td>EU0060</td>
<td>80 KW Emergency Generator – Building U (U414) 130 HP 4 cylinder diesel engine with a displacement of 1.14 liters per cylinder (Construction Date – January 2011)</td>
<td>Caterpillar/C4.4</td>
<td></td>
</tr>
<tr>
<td>EU0070</td>
<td>300 KW Emergency Generator – V Annex 480 HP 6 cylinder diesel engine with a displacement of 1.47 liters per cylinder (Construction Date – January 2011)</td>
<td>Caterpillar/C9</td>
<td>EP005</td>
</tr>
<tr>
<td>EU0080</td>
<td>125 KW Emergency Generator – Warson Fire Pump 197 HP diesel engine with a displacement of 1.13 liters per cylinder (Construction Date – January 2008)</td>
<td>John Deere</td>
<td></td>
</tr>
<tr>
<td>EU0090</td>
<td>500 KW Emergency Generator – Building N 755 Horsepower (HP) diesel engine with a displacement of 3.13 liters per cylinder (Construction Date – January 2000)</td>
<td>Cummins/KTA 19-G4</td>
<td></td>
</tr>
</tbody>
</table>
Monsanto Company
Installation ID: 189-0020

Intermediate State Operating Permit

EU0100
1.25 MW Emergency Generator – Building G-Annex #1
1,850 Horsepower (HP) diesel engine with a displacement of 3.14 liters per cylinder (Construction Date – January 1997)
Cummins/KTA50-G3

EU0110
1.25 MW Emergency Generator – Building G-Annex #2
1,850 Horsepower (HP) diesel engine with a displacement of 3.14 liters per cylinder (Construction Date – January 1997)
Cummins/KTA50-G3

EU0120
1.25 MW Emergency Generator – Building G-Annex #3
1,850 Horsepower (HP) diesel engine with a displacement of 3.14 liters per cylinder (Construction Date – January 1997)
Cummins/KTA50-G3

EU0130
125 KW Emergency Generator – Building B
197 Horsepower (HP) 6 cylinder diesel engine with a displacement of 1.13 liters per cylinder (Construction Date – 2015)
Cummins/QSB7-G5 NR3

EU0140
250 KW Emergency Generator – Building Z#2
130 Horsepower (HP) diesel engine with a displacement of 1.73 liters per cylinder (Construction Date – January 2005)
Caterpillar/3306-D1

EU0150
250 KW Emergency Generator – Nidus Building
130 Horsepower (HP) diesel engine with a displacement of 1.67 liters per cylinder (Construction Date – January 2005)
Caterpillar/3306-D1

Permit Condition (EU0050 through EU0080 and EUEU0130)-001

10 CSR 10-6.070 New Source Performance Regulations
40 CFR Part 60, Subpart III Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

**Emission Limitation/Standards:**

1) 2007 model year and later emergency CI ICE - with a displacement of less than 30 liters per cylinder that are not fire pump engines(EU0050, EU0060 and EU0070):
   a) The Permittee must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for 2007 model year and later emergency stationary CI ICE. [§60.4205(b)]
   b) For engines with a maximum engine power greater than or equal to 37 kilowatt (KW) (50 horsepower (HP)), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 for all pollutants beginning in model year 2007. [§60.4202(a)(2)]
   i) Exhaust emissions from EU0050 (2.25 MW Emergency Generator-Building J) shall not exceed the following: [Table 1 §89.112]
      • 1.3 grams per kilowatt-hour (g/KW-hr) of hydrocarbon (HC);
      • 9.2 g/KW-hr oxides of nitrogen (NOx);
      • 11.4 g/KW-hr of carbon monoxide (CO); and
      • 0.54 g/KW-hr of particulate matter (PM).
   ii) Exhaust emissions from EU0060 (80 KW Emergency Generator-Building U (414)) shall not exceed the following: [Table 1 §89.112]:
      • 4.0 g/KW-hr of non-methane hydrocarbon (NMHC) and oxides of nitrogen (NOx);
      • 5.0 g/KW-hr of CO; and
      • 0.30 g/KW-hr of PM.
   iii) Exhaust emissions from EU0070 (300 KW Emergency Generator V-Annex) shall not exceed the following: [Table 1 §89.112]:

iv) Exhaust emissions from EU0130 (125 KW Emergency Generator-Building B) shall not exceed the following: [Table 1 §89.112]:
- 4.0 g/KW-hr NMHC and NOx;
- 5.0 g/KW-hr of CO; and
- 0.30 g/KW-hr of PM.

2) For the 125 KW Emergency Generator Warson Fire Pump, the permittee must comply with the emission standards in table 4 to 40 CFR Part 60 Subpart III, for all pollutants. [§60.4205(c)]
   a) As stated in §60.4205(c), the permittee must comply with the following emission standards: [Table 4 to 40 CFR Part 60, Subpart III]
      - 10.5 g/KW-hr of NMHC and NOx;
      - 5.0 g/KW-hr of CO; and
      - 0.80 g/KW-hr of PM.

3) Smoke Emission Standard [§60.4202(a)(2) and 40 CFR 89.113]
   a) Exhaust opacity from compression-ignition nonroad engines for which this subpart is applicable must not exceed:
      i) 20 percent during the acceleration mode;
      ii) 15 percent during the lugging mode; and
      iii) 50 percent during the peaks in either the acceleration or lugging modes.
   b) Opacity levels are to be measured and calculated as set forth in 40 CFR part 86, subpart I.

4) The General Provisions of 40 CFR 60.1 through 19 apply as indicated in Table 8 of 40 CFR 60, Subpart III except that the permittee is not required to submit initial notification. [§60.4218 & §60.4214(b)]

5) The permittee must operate and maintain the emergency stationary CI ICE that achieve the emission standards as required in §60.4205(b) over the entire life of the engines. [§60.4206]

**Operational Limitation:**
The permittee must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted: [§60.4207(b)]

1) Sulfur content. 15 parts per million (ppm) maximum. [§80.510(b)(1)(i)]

2) Cetane index or aromatic content, as follows: [§80.510(b)(2)]
   a) A minimum cetane index of 40; or [§80.510(b)(2)(i)]
   b) A maximum aromatic content of 35 volume percent. [§80.510(b)(2)(ii)]

**Monitoring/Compliance Requirements:**

1) Prior to the startup of each engine, the permittee must install a non-resettable hour meter on each engine that does not meet the applicable emission standards for non-emergency engines. [§60.4209(a)]

2) The permittee must do all of the following, except as permitted under §60.4211(g): [§60.4211(a)]
   a) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [§60.4211(a)(1)]
   b) Change only those emission-related settings that are permitted by the manufacturer; and [§60.4211(a)(2)]
   c) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to the you. [§60.4211(a)(3)]
3) The permittee must comply with the emission standards specified in §60.4205(b), the permittee must comply by purchasing an engine certified to the emission standards in §60.4205(b) and (c), for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in §60.4211(g). [§60.4211(c)]

4) The permittee must operate the emergency stationary ICE according to the requirements in §60.4211(f)(1), (f)(2)(i) and (f)(3). In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in §60.4211(f)(1), (f)(2)(i) and (f)(3), is prohibited. If the permittee does not operate the engine according to the requirements in §60.4211(f)(1), (f)(2)(i) and (f)(3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. [§60.4211(f)]

a) There is no time limit on the use of emergency stationary ICE in emergency situations. [§60.4211(f)(1)]

b) The permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraphs §60.4211(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by §60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by this paragraph §60.4211(f)(2). [§60.4211(f)(2)]

i) 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 owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [§60.4211(f)(2)]

c) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in §60.4211(f)(2). Except as provided in §60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [§60.4211(f)(3)]

i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [§60.4211(f)(3)]

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator; [§60.4211(f)(3)(i)(A)]

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [§60.4211(f)(3)(i)(B)]

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [§60.4211(f)(3)(i)(C)]
(D) The power is provided only to the facility itself or to support the local transmission and
distribution system. [§60.4211(f)(3)(i)(D)]

(E) The permittee identifies and records the entity that dispatches the engine and the specific
North American Electric Reliability Corporation (NERC), regional, state, public utility
commission or local standards or guidelines that are being followed for dispatching the
engine. The local balancing authority or local transmission and distribution system
operator may keep these records on behalf of the permittee. [§60.4211(f)(3)(i)(E)]

**Record Keeping/Reporting:**

Notification, Reports, and Records: [§60.4214]

According to §60.4214(b), the permittee is not required to submit an initial notification.

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**Permit Condition (EU0090 through EU0120)-001 and**

**Permit Condition (EU0140 through EU0150)-001**

10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds

**Emission Limitation:**
The permittee shall not cause or permit the emission into the atmosphere of gases containing more than
500 ppmv of sulfur dioxide or more than 35 mg/m³ of sulfuric acid or sulfur trioxide or any combination
of those gases averaged on any consecutive three-hour time period from the Emergency Generators.
[10 CSR 10-6.260(3)(A)2.]

**Operational Limitation:**
The permittee shall be limited to burning low sulfur fuel oil with a sulfur content of no more than 15
ppmv to meet the limits of this rule.

**Monitoring/Record Keeping:**
1) The permittee shall maintain an accurate record of the sulfur content of fuel used. Fuel purchase
receipts, analyzed samples, or fuel oil supplier certifications that verify the fuel type and sulfur
content will be acceptable.

2) Record keeping shall be accomplished in accordance with the requirements of 10 CSR 10-
6.065(6)(C)1.C General Record Keeping and Reporting Requirements, as stated in Section V of this
permit.

**Reporting:**
The permittee shall report any deviations/exceedances of this permit condition using the annual
monitoring report and annual compliance certification to the SLCDH St. Louis County Air Pollution
Control Program, 6121 North Hanley Road, Berkeley, MO 63134 and the Air Pollution Control
Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, or
AirComplianceReporting@dnr.mo.gov, as required by Section V of this permit.

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2 Ibid.
Permit Condition (EU0090 through EU0120)-002 and Permit Condition (EU0140 through EU0150)-002

Emission Limitation:
The permittee must limit the fuel sulfur content of the fuel oil to no more than 8,812 parts per million (ppm). [10 CSR 10-6.261(3)(C)]

Compliance Demonstration:
The permittee must determine compliance with the fuel sulfur content limitation of this permit condition as follows:
1) Fuel delivery records; or
2) Fuel sampling and analysis; or
3) Fuel supplier certification letters may be used as an alternate method of compliance.

Record Keeping:
1) The permittee must maintain fuel delivery/purchase receipts and/or fuel sampling tests as applicable or fuel oil supplier certification letters.
2) The permittee must maintain the fuel supplier certification information to certify all fuel deliveries. Bills of lading and/or other fuel delivery documentation containing the following information for all fuel purchases or deliveries are deemed acceptable to comply with the requirements of this rule:
   a) The name, address, and contact information of the fuel supplier;
   b) The type of fuel (diesel or #2 fuel oil);
   c) The sulfur content or maximum sulfur content expressed in percent sulfur by weight or in ppm sulfur; and
   d) The heating value of the fuel.
3) The permittee must use fuel sampling and analysis to determine sulfur weight percent, or equivalent, of fuel(s) in accordance with 10 CSR 10-6.040. This requirement does not apply if the permittee uses the fuel supplier certification as a method of compliance.
4) The permittee must retain all reports and records on-site for a minimum of five (5) years and make available within five (5) business days upon written or electronic request by the Director.

Reporting:
1) The permittee must furnish the Director all data necessary to determine compliance status.
2) The permittee shall report any excess emissions other than startup, shutdown, and malfunction excess emissions already required to be reported under 10 CSR 10-6.050 to the Director for each calendar quarter within thirty (30) days following the end of the quarter. In all cases, the notification must be written and include the information listed in 10 CSR 10-6.261 (4) (A) 1.
3) The permittee shall report any deviations/exceedances of this permit condition using the annual monitoring report and annual compliance certification to the SLCDH St. Louis County Air Pollution Control Program, 6121 North Hanley Road, Berkeley, MO 63134 and the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, or AirComplianceReporting@dnr.mo.gov, as required by Section V of this permit.

3 Ibid.
IV. Core Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR), 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 on the date of permit issuance. The following are only excerpts from the regulation or code, and are 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) 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.

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) 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 to the director in writing at least ten days prior to any maintenance, start-up or shutdown activity 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, notice shall be given as soon as practicable prior to the activity.
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. The permittee shall retain the most current operating permit issued to this installation on-site. The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.

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.

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 Reporting of Emission Data, Emission Fees and Process Information
1) The permittee shall submit a Full Emissions Report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.

2) 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.

3) The permittee shall submit a full EIQ for the 2017 and 2020 reporting years. In the interim years the installation may submit a Reduced Reporting Form; however, if the installation’s emissions increase or decrease by more than five tons when compared to their last submitted full EIQ, the installation shall submit a full EIQ rather than a Reduced Reporting Form.

4) In addition to the EIQ submittal schedule outlined above, any permit issued under 10 CSR 10-6.060 section (5) or (6) triggers a requirement that a full EIQ be submitted in the first full calendar year after the permitted equipment initially operates.
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 10-6.165 Restriction of Emission of Odors
This is a State Only permit requirement.
No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin
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.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants
1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.

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

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

This is a State Only permit requirement.

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.

10 CSR 10-6.280 Compliance Monitoring Usage

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

2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at an installation:
   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.
10 CSR 10-5.040 Use of Fuel in Hand-Fired Equipment Prohibited
No owner or operator shall operate applicable hand-fired fuel burning equipment unless the owner or operator meets the conditions set forth in 10 CSR 10-5.040. This regulation shall apply to all hand-fired fuel-burning equipment at commercial facilities 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 or to other equipment exempted under 10 CSR 10-5.040. 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.

10 CSR 10-5.060 Refuse Not to be Burned in Fuel Burning Installations
(Rescinded on February 11, 1979, 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.

10 CSR 10-5.120 Information on Sales of Fuels to be Provided and Maintained
Every delivery of coal or residual fuel oil when first delivered to a consumer or wholesaler in the St. Louis metropolitan area must be accompanied by a ticket prepared in triplicate and containing at least the name and address of the seller and the buyer; the grade of fuel; ash content of coal, the source of the fuel, which must be an approved source, and such other information as the Air Conservation Commission may require. One copy of each ticket shall be kept by the person delivering the fuel and be retained for one year; one copy is to be given to the recipient of the fuel to be retained for one year; and, upon request, within 30 days after delivery of the fuel, the delivering party shall mail one copy to the Air Conservation Commission.

10 CSR 10-5.130 Certain Coals to be Washed
The permittee shall not import, sell, offer for sale, expose for sale, exchange, deliver or transport for use and consumption in the St. Louis metropolitan area or use or consume in the said area any coal which as mined containing in excess of 2.0% sulfur or 12.0% ash calculated as described in 10 CSR 10-5.110, unless it has been cleaned by a process known as "washing" so that it shall contain no more than 12.0% ash on a dry basis. The term "washing" is meant to include purifying, cleaning, or removing impurities from coal by mechanical process, regardless of cleaning medium used.

40 CFR Part 82 Protection of Stratospheric Ozone (Title VI)
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 40 CFR §82.106.
   b) The placement of the required warning statement must comply with the requirements of 40 CFR §82.108.
   c) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR §82.110.
   d) No person may modify, remove, or interfere with the required warning statement except as described in 40 CFR §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 of 40 CFR Part 82:
   a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices described in 40 CFR §82.156.
   b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment described in 40 CFR §82.158.
   c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR §82.161.
   d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with the record keeping requirements of 40 CFR §82.166. ("MVAC-like" appliance as defined at 40 CFR §82.152).
   e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR §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 40 CFR §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 contained 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.
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, §(5)(C)1, §(6)(C)1.B, §(5)(E)2.C 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. If a timely and complete application for a permit renewal is submitted, but the Air Pollution Control Program fails to take final action to issue or deny the renewal permit before the end of the term of this permit, this permit shall not expire until the renewal permit is issued or denied.

10 CSR 10-6.065, §(5)(C)1 and §(6)(C)1.C General Record Keeping and Reporting Requirements

1) Record Keeping
   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, Compliance and Enforcement Section, P. O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov.
   b) The permittee shall submit a report of all required monitoring by:
      i) April 1st for monitoring which covers the January through December time period.
      ii) Exception. Monitoring requirements which require reporting more frequently than 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, record keeping, reporting, or any other requirements of the permit.
   d) Submit supplemental reports as required or as needed. 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 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 annual report shall be reported on the schedule specified in this permit.

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 
deveiation.

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

10 CSR 10-6.065 §(5)(C)1 and §(6)(C)1.D Risk Management Plan Under Section 112(r) 
If the installation is required to develop and register a risk management plan pursuant to Section 112(R) 
of the Act, the permittee will verify that it has complied with the requirement to register the plan.

10 CSR 10-6.065(5)(C)1.A 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 under this 
rule.

6) Failure to comply with the limitations and conditions that qualify the installation for an Intermediate 
permit make the installation subject to the provisions of 10 CSR 10-6.065(6) and enforcement action 
for operating without a valid part 70 operating permit.
10 CSR 10-6.065(5)(C)1.C  Reasonably Anticipated Operating Scenarios

None.

10 CSR 10-6.065, §(5)(B)4; §(5)(C)1, §(6)(C)3.B; and §(6)(C)3.D; and §(5)(C)3 and §(6)(C)3.E.(I) – (III) and (V) – (VI) 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 semiannually (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 the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and exceedances 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, §(5)(C)1 and §(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(5)(C)5 Off-Permit Changes

1) Except as noted below, the permittee may make any change in its permitted installation’s operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. 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 a Title I modification; Please Note: Changes at the installation which affect the emission limitation(s) classifying the installation as an intermediate source (add additional equipment to the record keeping requirements, increase the emissions above major source level) do not qualify for off-permit changes.
   b) The permittee must provide contemporaneous written notice of the change to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219. 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; and
   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.

10 CSR 10-6.020(2)(R)34 Responsible Official

The application utilized in the preparation of this permit was signed by Oscar Berryman, Director, Corporate Services. 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 §(5)(E)4 and §(6)(E)6.A(III)(a)-(c) Reopening-Permit for Cause
This permit may be reopened for cause if:
1) The Missouri Department of Natural Resources (MoDNR) 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,
2) 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,
3) MoDNR or EPA determines that the permit must be reopened and revised to assure compliance with
applicable requirements.

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**

Installation - Wide Nitrogen Oxides (NO₉) Emissions Tracking Record
12-Month Rolling Total.

This record keeping sheet or an equivalent sheet may be used to meet the NOₓ record keeping requirements of Permit Condition PW001 (copy as needed).

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
<th>Column C</th>
<th>Column D</th>
<th>Column E</th>
<th>Column F</th>
<th>Column G</th>
<th>Column H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month/Year</td>
<td>Source</td>
<td>Fuel Type</td>
<td>Emission Factor</td>
<td>Emission Factor Source</td>
<td>Amount Combusted (units)</td>
<td>Monthly Total Emissions (tons)</td>
<td>Cumulative NOₓ Emissions (12-Month Rolling Total)</td>
</tr>
<tr>
<td>Boilers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiler #2 and #5 (EU0010 and EU0040)</td>
<td>natural gas</td>
<td>100 lb/10⁶ scf</td>
<td>AP-42, Table 1.4-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>#2 fuel oil</td>
<td>20 lb/10³ gal</td>
<td>AP-42, Table 1.3-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiler #3 and 4 (EU0020 and EU0040)</td>
<td>natural gas</td>
<td>50 lb/10⁶ scf</td>
<td>AP-42, Table 1.4-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>#2 fuel oil</td>
<td>20 lb/10³ gal</td>
<td>AP-42, Table 1.3-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Generator Engines</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Building J</td>
<td>#2 fuel oil</td>
<td>7.70 grams(g)/hp-hr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G Annex #1</td>
<td>#2 fuel oil</td>
<td>12.60 g/hp-hr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G Annex #2</td>
<td>#2 fuel oil</td>
<td>12.60 g/hp-hr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G Annex #3</td>
<td>#2 fuel oil</td>
<td>12.60 g/hp-hr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building N</td>
<td>#2 fuel oil</td>
<td>9.85 g/hp-hr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nidus</td>
<td>#2 fuel oil</td>
<td>9.30 g/hp-hr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warson Fire Pump</td>
<td>#2 fuel oil</td>
<td>2.69 g/hp-hr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Z #2</td>
<td>#2 fuel oil</td>
<td>5.09 g/hp-hr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building B</td>
<td>#2 fuel oil</td>
<td>2.39 g/hp-hr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V Annex</td>
<td>#2 fuel oil</td>
<td>4.98 g/hp-hr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U414</td>
<td>#2 fuel oil</td>
<td>2.98 g/hp-hr</td>
<td>AP-42, Table 3.3-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building W</td>
<td>natural gas</td>
<td>16.2 g/hp-hr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building U</td>
<td>natural gas</td>
<td>4.08 g/hp-hr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building R</td>
<td>natural gas</td>
<td>4.08 g/hp-hr</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Note:

1. No. 2 diesel oil contains 138,000 Btu/gal, natural gas contains an average heating value of 1020 Btu/scf and a high heating value of 1050 Btu/scf.

2. To calculate monthly emissions from generators:
   \[
   \text{Monthly Emissions (tons)} = [\text{Generator Power Rating (hp)} \times \text{Hours of Operation}] \times [\text{Emission Factor (g/hp-hr)}] \times [0.002205 \text{ lb/g} \times 0.005 \text{ ton/lb}]
   \]

3. Engines subject to 40 CFR Part 60, Subpart IIII can use the applicable NOx emission limit in the rule as an emission factor.

4. The cumulative NOx emissions (Column H) is calculated by adding the monthly NOx emissions for each source (Column G), and adding to previous cumulative NOx emissions (Column H).

<table>
<thead>
<tr>
<th>Source</th>
<th>Fuel Type</th>
<th>Emission Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radio Tower</td>
<td>natural gas</td>
<td>4.08 g/hp-hr</td>
</tr>
<tr>
<td>Nidus Fire Pump</td>
<td>natural gas</td>
<td>4.08 g/hp-hr</td>
</tr>
</tbody>
</table>
## Method 22 Opacity Observations

<table>
<thead>
<tr>
<th>Company</th>
<th>Observer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Date</td>
</tr>
<tr>
<td>Sky Conditions</td>
<td>Wind Direction</td>
</tr>
<tr>
<td>Precipitation</td>
<td>Wind Speed</td>
</tr>
<tr>
<td>Time</td>
<td>Stack</td>
</tr>
</tbody>
</table>

Sketch stack: indicate observer position relative to stack; indicate potential stacks and/or actual stacks.

<table>
<thead>
<tr>
<th>Hour</th>
<th>Minute</th>
<th>Seconds</th>
<th>Visible Emissions</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>0 15 30 45</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2</td>
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<td>3</td>
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<tr>
<td>6</td>
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</tbody>
</table>

If visible emissions are observed, the installation is not required to complete the entire six-minute observation. The installation shall note when the visible emissions were observed and shall conduct a Method 9 opacity observation.
### Method 9 Opacity Emissions 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</td>
<td>15</td>
<td>30</td>
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<tr>
<td>0</td>
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</tbody>
</table>

### SUMMARY OF AVERAGE OPACITY

<table>
<thead>
<tr>
<th>Set Number</th>
<th>Time</th>
<th>Opacity</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Start</td>
<td>End</td>
<td>Sum</td>
<td>Average</td>
<td></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
Attachment D

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>
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<td>Malfunction</td>
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STATEMENT OF BASIS

Voluntary Limitations
In order to qualify for this Intermediate State Operating Permit, the permittee has accepted voluntary, federally enforceable emission limitations. Per 10 CSR 10-6.065(5)(C)1.A.(VI), if these limitations are exceeded, the installation immediately becomes subject to 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit. It is the permittee's responsibility to monitor emission levels and apply for a part 70 operating permit far enough in advance to avoid this situation. This may mean applying more than eighteen months in advance of the exceedance, since it can take that long or longer to obtain a part 70 operating permit.

INSTALLATION DESCRIPTION
Monsanto Company is an agricultural research and development installation. This particular installation has several buildings used for research, which are equipped with hoods, solvent storage cabinets, and/or solvent storage rooms. The installation operates several emergency generators onsite. The emergency generators are used during emergency situations, for periodic testing and maintenance of the generators. The majority of the facility's emissions are from the natural gas boilers, which are equipped to run on fuel oil as a back-up.

The installation has the potential to emit nitrogen oxides (NOx) above the major source thresholds; however, the installation has accepted has accepted voluntary, federally enforceable emission limitations limiting NOx emissions to less than major source levels to qualify for this permit.

Updated Potential to Emit for the Installation and Reported Air Pollutant Emissions, in tons per year

<table>
<thead>
<tr>
<th>Pollutants</th>
<th>Potential Emissions¹</th>
<th>Reported Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter ≤ Ten Microns (PM₁₀)</td>
<td>15.75</td>
<td>2017  2016  2015  2014  2013</td>
</tr>
<tr>
<td></td>
<td>7.16</td>
<td>7.16  7.17  7.37  7.32</td>
</tr>
<tr>
<td>Particulate Matter ≤ 2.5 Microns (PM₂.₅)</td>
<td>12.71</td>
<td>2017  2016  2015  2014  2013</td>
</tr>
<tr>
<td></td>
<td>3.91</td>
<td>3.91  3.92  4.01  3.98</td>
</tr>
<tr>
<td></td>
<td>0.22</td>
<td>0.22  0.28  0.53  0.41</td>
</tr>
<tr>
<td>Nitrogen Oxides (NOx)</td>
<td>Less than 100.00</td>
<td>2017  2016  2015  2014  2013</td>
</tr>
<tr>
<td></td>
<td>17.71</td>
<td>17.77  18.91  25.17  23.30</td>
</tr>
<tr>
<td></td>
<td>0.84</td>
<td>0.84  0.86  1.06  1.00</td>
</tr>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>98.76</td>
<td>2017  2016  2015  2014  2013</td>
</tr>
<tr>
<td></td>
<td>12.56</td>
<td>12.54  12.66  14.74  14.26</td>
</tr>
<tr>
<td>Hazardous Air Pollutants (HAPs)</td>
<td>2.26</td>
<td>2017  2016  2015  2014  2013</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.00  0.00  0.00  0.00</td>
</tr>
</tbody>
</table>

¹Each emission unit was evaluated at 8,760 hours of uncontrolled annual operation unless otherwise noted.
- Potential Emissions of NOₓ is based on federally enforceable emission limitations of Permit Conditions PW001. This limit keeps the potential to emit below major levels, thus allowing the facility to obtain this
Intermediate Operating Permit. Fuel oil storage tanks (sources listed as emission units without limitations) were not included in the facility total potential to emit.

- Emissions from the emergency generators were evaluated at 500 hours of operation per year.
- Potential emissions rates of all pollutants except NO\textsubscript{x} shown in the above table are unconditioned.

**Permit Reference Documents**

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

1) Intermediate Operating Permit Application, received April 6, 2015; revised February 22, 2016;
2) Initial Operating Permit, Project No. 2006-03-074, Issued December 7, 2010;
3) 2016 Emissions Inventory Questionnaire, received April 235, 2017; and
4) St. Louis County Construction Permits #1768, #5380, #5381, #5382, #5383, #5385, #5386, #5387, #5388, #5389, #5522, #5702, # 6201, #6737, #7371, and #7372. These construction permits contained no special conditions. Therefore, they are not included in this operating permit;

**Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits**

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

None

**Other Air Regulations Determined Not to Apply to the Operating Permit**

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

   
   This regulation does not apply to the installation. 10 CSR 10-6.405(1)(E) exempts installations which exclusively combust natural gas and fuel oils #2 through #6. And also Per 10 CSR 10-6.405(1)(C), the three boilers (EU0010 through EU0030) are exempt from this rule because they are subject to the provisions of 10 CSR 10-6.070.

2) 10 CSR 10-6.270, *Acid Rain Source Permits Required.*
   
   This rule has not been included in the operating permit because the potential to emit NO\textsubscript{x} from the two boilers does not exceed 100 tons and otherwise do not meet the applicability requirements of this rule.

3) 10 CSR 10-5.570, *Control of Sulfur Emissions from Stationary Boilers.*
   
   This regulation does not apply to the installation. This regulation applies to boilers and process heaters with a capacity of 50 MMBtu/hr or greater. The three boilers (EU0010, EU0030 and EU0040) are rated greater than 50 MMBtu/hr each; however, the boilers exclusively burn natural gas with a backup #2 fuel oil with less than 0.5% sulfur are exempt from the requirements of the rule per 10 CSR 10-5.570(1)(C)5.
4) 10 CSR 10-5.220, Control of Petroleum Liquid Storage Loading and Transfer.
   The rule is intended to restrict volatile organic compound emissions from the handling of petroleum
   liquids. Monsanto is exempt from this rule since none of the tanks on-site store a petroleum liquid
   as defined in 10 CSR 10-6.020 (2) Definitions.

5) 10 CSR 10-5.330, Control of Emissions from Industrial Surface Coating Operations.
   This rule is not applicable to the maintenance paint booth, because maintenance painting is not
   considered an industrial surface coating operation.

6) 10 CSR 10-5.300, Control of Emissions from Solvent Metal Cleaning.
   This rule is not applicable to the aqueous parts washer, because the solvent used in the cold cleaner
   meets the definition of aqueous solvent.

7) 10 CSR 10-5.500, Control of Emissions from Volatile Organic Liquid Storage.
   The provisions of this rule shall apply to all storage containers of volatile organic liquid (VOL) with
   a maximum true vapor pressure of one-half pound per square inch (0.5 psia) or greater in any
   stationary tank, reservoir or other container of forty thousand (40,000) gallon capacity or greater.
   This rule is not applicable because Monsanto does not store volatile organic liquid in tanks equal to
   or greater than 40,000 gallons in capacity.

8) 10 CSR 10-5.510, Control of Emissions of Nitrogen Oxides.
   This rule applies to installations located in the counties of Franklin, Jefferson, St. Charles, and St.
   Louis and the City of St. Louis with the potential to emit one hundred (100) tons or greater per year
   of nitrogen oxides.

Monsanto’s potential NOx emissions are limited to less than 100 tons/year by a federally enforceable
limit in in this permit. Therefore, this rule does not apply to Monsanto.

9) 10 CSR 10-5.570, Control of Sulfur Emissions from Stationary Boilers.
   This rule applies to installations located in the counties of Franklin, Jefferson, St. Charles, St. Louis,
   and St. Louis City that own or operate an industrial, commercial, or institutional boiler or process
   heater that has a name plate capacity greater than 50 MMBtu/hr. Boilers that exclusively burn
   natural gas, liquefied petroleum gas (LPG), and/or fuel oil number two (2) with less than 0.5% sulfur
   are also not subject to this rule. Since the boilers at this installation burn natural gas and/or fuel oil
   number two (2) with less than 0.5% sulfur; the installation is not subject to this rule.

10) 10 CSR 10-6.390, Control of NOx Emissions from Large Stationary Internal Combustion Engines
    This rule is not applicable because the internal combustion engines at Monsanto are used only for
    emergency standby purposes, as defined in 10 CSR 10-6.390 (2)(C).

Construction Permit History
The following revisions were made to construction permits for this installation:
   None
New Source Performance Standards (NSPS) Applicability

The installation is potentially subject to several NSPS rules. Below is a summary of the potentially applicable subparts and the facilities applicability and compliance status to those subparts.

   The installation becomes subject to Subpart A - General Provisions upon becoming subject to an NSPS standard. If the installation is subject to various NSPS Standards; therefore, they are also subject to Subpart A.

   The provisions of this subpart apply to each fossil-fuel-fired steam generating unit of more than 73 megawatts heat input rate (250 million Btu per hour) constructed, modified, or reconstructed after August 17, 1971 and not covered under Subpart Da.

   None of the boilers are rated at greater than 73 megawatts heat input rate (250 million Btu per hour). Therefore, this subpart does not apply to Monsanto.

   The provisions of this subpart apply to each electric utility fossil-fuel-(either alone or in combination with any other fuel) fired steam generating unit of more than 73 megawatts heat input rate (250 million Btu per hour) constructed, modified, or reconstructed after September 18, 1978.

   None of the boilers are electric utility steam generating units as defined in this subpart nor are rated at greater than 73 megawatts heat input rate (250 million Btu per hour). Therefore, this subpart does not apply to Washington University.

4) 40 CFR Part 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.
   The provisions of this subpart apply to each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 MW (100 million Btu per hour).

   None of the boilers are rated at greater than 29 megawatts heat input rate (100 million Btu per hour). Therefore, this subpart does not apply to Monsanto.

5) 40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.
   Subpart Dc applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu/hr) or less, but greater than or equal to 2.9 MW (10 million Btu/hr).

   Monsanto’s boilers with a maximum design heat input capacity less than or equal to 10 MMBtu/hr, but greater than or equal to 10 MMBtu/hr, constructed after the applicability date of this subpart are subject to this subpart. Whereas, Boiler #5 with maximum design heat input capacity greater than 10 MMBtu/hr constructed before the applicability date of this subpart is not subject to this rule.

a) All storage tanks were constructed after the applicability dates of Subpart Ka or Kb. Therefore, the tanks are not subject to 40 CFR Part 60 Subpart Ka or Kb.

b) The following storage tanks are not subject to the requirements of Subpart Kb. This subpart does not apply to storage vessels with a capacity greater than or equal to 151 m$^3$ (39,890 gallons) storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) (26.25 mmHg) or with a capacity greater than or equal to 75 m$^3$ (19,812.9 gallons) but less than 151 m$^3$ storing a liquid with a maximum true vapor pressure less than 15.0 kPa (112.51 mmHg). The tanks have the capacities that fall within the regulated volumes stated in the rule. However, the maximum true vapor pressure (as defined in the regulation) of the fuel oil does not exceed 15 kPa (i.e., 112.5 mmHg). Per the manufacturer’s MSDS, the vapor pressure of the fuel oil is 0.02 mmHg. Since the tanks are located underground, the temperature of the fuel oil will not change significantly, and thus, its vapor pressure will never exceed 15 kPa.

Three (3) No. 2 Fuel Oil Storage Tanks:
- Two – 30,000 Gallon (each) Underground Storage Tanks
- One – 20,000 Gallon Aboveground Storage Tank

This subpart is applicable to owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons who construct, reconstruct, or modify an engine after July 11, 2005, where the stationary engine is manufactured after April 1, 2006. A compression ignition is a type of stationary internal combustion engine that is not a spark ignition engine. Listed below are the only engines that this rule applies:

<table>
<thead>
<tr>
<th>Emission Unit/Description</th>
<th>Building Name (location)</th>
<th>Fuel Type</th>
<th>Year Installed</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU0050 - 2.25 MW Emergency Generator</td>
<td>Building J</td>
<td>Diesel</td>
<td>2007</td>
</tr>
<tr>
<td>EU0060 - 80 KW Emergency Generator</td>
<td>Building U (U414)</td>
<td>Diesel</td>
<td>2011</td>
</tr>
<tr>
<td>EU0070 - 300 KW Emergency Generator</td>
<td>V Annex</td>
<td>Diesel</td>
<td>2011</td>
</tr>
<tr>
<td>EU0080 - 125 KW Emergency Generator</td>
<td>Warson Fire Pump</td>
<td>Diesel</td>
<td>2018</td>
</tr>
<tr>
<td>EU0080 - 125 KW Emergency Generator</td>
<td>Building B</td>
<td>Diesel</td>
<td>2015</td>
</tr>
</tbody>
</table>

The natural gas fired emergency generators at Monsanto do not meet the construction and manufacture date identified in this subpart. These generators have also not been modified or reconstructed since they were installed. Thus, they are not subject to 40 CFR Part 60, Subpart JJJJ.

9) NSPS Applicability Summary

Based upon a comparison of the installations operations to each NSPS Standard, the installation is subject to the following NSPS Standards:

- 40 CFR Part 60 – Subpart De, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Maximum Achievable Control Technology (MACT) Applicability

10 CSR 10-6.075, Maximum Achievable Control Technology Regulations

National Emission Standards for Hazardous Air Pollutants (NESHAPS) promulgated after the 1990 Clean Air Act Amendments are found in 40 CFR Part 63. The 1990 Clean Air Act Amendments, significantly expanded EPA’s authority to regulate hazardous air pollutants. These standards require application of technology based emissions standards referred to as Maximum Achievable Control Technology (MACT). Consequently, these post-1990 NESHAPs are also referred to as MACT standards. MACT is a technology-based standard, as opposed to the original conception of NESHAPs as a risk-based standard.

Section 112 of the Clean Air Act lists 187 hazardous air pollutants to be regulated by source category. EPA has identified "source categories" that must meet technology requirements to control HAP emissions and is required to develop standards for all industries that emit one or more of the HAPs in significant quantities. The standards are based on emissions levels already achieved by best-performing similar facilities.

Industries subject to MACT standards are classified as either major sources or area sources.

- Major sources are sources that emit 10 tons per year of any of the listed HAPs, or 25 tons per year of a mixture of HAPs.
- Area sources are sources that emit less than 10 tons per year of a single HAP or less than 25 tons per year of a combination of HAPs. Area sources must employ Generally Available Control Technology (GACT) which is based on appropriate practices/techniques commercially available and taking into account economic and technical considerations.

MACT standards are applicable to major sources, while GACT standards are applicable to area sources.

The installation has the potential to emit various HAPs. The installation combusts natural gas and fuel oil, each of which has the potential to emit several different HAPs. The total HAPs that are potentially emitted are less than the 10/25 tons per year, thus the installation is an area source of HAPs.

Based upon a comparison of the installation operations to each area source MACT/GACT Standard, the installation is potentially subject to the following MACT/GACT standards: (NOTE: This is not an
analysis of every MACT/GACT standard, it is an analysis of the MACT/GACT standards that are potentially applicable to the installation).

   The provisions of this subpart apply to all new and existing industrial process cooling towers that are operated with chromium-based water treatment chemicals on or after September 8, 1994, and are either major sources or are integral parts of facilities that are major sources as defined in 40 CFR 63.401.

   The installation is not a major source of HAPs nor the cooling towers located at this installation use chromium-based water treatment chemicals, therefore, this rule does not apply.

   Monsanto is an agricultural research and development installation with two digit SIC codes 8731 (Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology)) and NAICS Code 541712. Using the guidance document referenced below, the facility SIC Code/NAICS code is listed as “institutional”:


   The following definition in the guidance document defines Monsanto’s emergency generators:

   “Institutional emergency stationary RICE means an emergency stationary reciprocating internal combustion engine (RICE) used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.”

   According to 40 CFR 63.6585(f)(3), existing emergency stationary RICE located at an area source of HAP emissions are exempt from the RICE MACT regulations pursuant to 40 CFR Part 63, Subpart ZZZZ.

   a) The existing emergency (diesel or natural gas fired) generator engines (listed below) located at Monsanto are not subject to 40 CFR Part 63, Subpart ZZZZ because they are located at an institutional facility that is an area source of HAPs. (“Existing” engines per Subpart ZZZZ are those engines whose construction or reconstruction commenced before June 12, 2006.)

   Five (5) Emergency Stationary Reciprocating Internal Combustion Natural Gas Engines
   • 15 KW Emergency Generator – Building R, Year Installed: 2005
   • 15 KW Emergency Generator – Building U, Year Installed: 2005
   • 150 KW Emergency Generator – Building R, Year Installed: 2002
   • 65 KW Emergency Generator – Nidus Fire Pump, Year Installed: 1999
   • 15 KW Emergency Generator – Radio Tower, Year Installed: 1989

   Six (6) Emergency Stationary Reciprocating Internal Combustion Diesel Engines
b) The new compression ignition diesel engines at Monsanto that are subject to the 40 CFR Part 60, Subpart IIII are automatically compliant with the requirements of 40 CFR Part 63, Subpart ZZZZ and according to §63.6590(c)(1) of Subpart ZZZZ of 40 CFR Part 63, no further requirements apply for such engines under this part for “new” compression ignition engines.

   The Subpart applies to a facility that owns or operates an industrial institutional, or commercial boiler, or process heaters that is located at a major source, or is part of a major source of HAP emissions. A process heater is defined as a unit in which the combustion gases do not directly come into contact with process material or gases in the combustion chamber (e.g., indirect fired). A boiler is defined as an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water.

   The provisions of 40 CFR Part 63, Subpart DDDDD do not apply to the boilers at Monsanto because these boilers are located at a facility whose regulated activities presented in this permit application potentially emit less than the major source thresholds for HAPs.

   This regulation applies to boilers at area source facilities that burn coal, oil, biomass, or non-waste materials. Gas-fired boilers as defined in this regulation would not be affected by the rule.

   The provisions of 40 CFR Part 63, Subpart JJJJJJ do not apply to the boilers at Monsanto because these emission units are classified as gas-fired units per §63.11237. Additionally, periodic testing, maintenance, or operator training on fuel oil is limited to a combined total of 48 hours per calendar year for each boiler.

5) 40 CFR Part 63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning
   This rule applies to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform, or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent. Wipe cleaning activities, such as using a rag containing halogenated solvent or a spray cleaner containing halogenated solvent, are not covered under this rule.

   Monsanto does not conduct this type of solvent cleaning or use solvents containing the listed chemicals; therefore the Aqueous Parts Washer is not subject to the MACT standards for halogenated solvent cleaning.
National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants
National Emission Standards for Hazardous Air Pollutants (NESHAPS) are stationary source standards for hazardous air pollutants. NESHAPS were originally required by the 1970 Clean Air Act (CAA). These standards were developed for sources and source categories that were determined to pose adverse risk to human health by the emission of HAPs. The Part 61 NESHAPs regulate only 7 hazardous air pollutants - Asbestos, Beryllium, Mercury, Vinyl Chloride, Benzene, Arsenic, Radon/Radionuclides. Prior to 1990, the Clean Air Act required EPA to set standards for each toxic air pollutant individually, based on its particular health risks. Thus, NESHAPs are risk-based standards that apply to all existing and new/modified sources regardless if they are a minor or major HAP Facility. (NOTE: This is not an analysis of every NESHAP standard; it is an analysis of the NESHAP standard that is potentially applicable to the installation).

   The installation is not subject to any NESHAP standard with the exception of Subpart M - National Emission Standard for Asbestos. The installation is potentially subject to Subpart M. If the installation conducts any demolition or renovation projects to a building(s) containing asbestos, they must determine applicability with the following NESHAP regulations:
   - Demolition and Renovation - 40 CFR 61.145
   - Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying - 40 CFR 61.150

Other Regulatory Determinations

1) 10 CSR 10-6.260, Restriction of Emissions of Sulfur Compounds and 10 CSR 10-6.261, Control of Sulfur Dioxide Emissions.
   10 CSR 10-6.260 was rescinded on November 30, 2015 and replaced by 10 CSR 10-6.261; however, the provisions of 10 CSR 10-6.260 currently remain in the State Implementation Plan and thus are federally enforceable and applicable to the installation. The provisions of 10 CSR 10-6.260 will expire and the provisions of 10 CSR 10-6.261 will become federally enforceable once 10 CSR 10-6.261 is incorporated into the federally-approved SIP as a final EPA action
   a) 10 CSR 10-6.260(3)(A)2. and 10 CSR 10-6.261(3)(C) apply to all the “new” emergency generators at the Monsanto that use fuel oil. There are no “existing” emergency generators at Monsanto. (Existing sources in the St. Louis metropolitan area as defined in 10 CSR 10-6.020: any equipment, machine, device, article, contrivance, or installation that is existing, installed, or under construction on March 24, 1967.)
      Monsanto is in compliance with the SO₂ emissions limit of 500 ppmv averaged on any consecutive 3-hour period and SO₃/H₂SO₄ limit of 35 mg/m³ averaged on any consecutive 3-hour period for fuel oil of 10 CSR 10-6.260(3)(A)2 and also with the 8,812 ppm sulfur limit of 10 CSR 10-6.261(3)(C). Monsanto has and will continue to purchase low sulfur fuel oil (i.e., ≤15 ppmv sulfur content) to meet the limit of this rule.
   b) According to 10 CSR 10-6.260(1)(A)(2) and 10 CSR 10-6.261(1)(A), natural gas and liquefied petroleum gas (propane) fired sources are exempt from the requirements of these rules.
c) According to 10 CSR 10-6.261(1)(C), emission units subject to a more restrictive SO₂ emission limit or more restrictive fuel sulfur content limit under 10 CSR 10-6.070 or any federally enforceable permit are exempt from the requirements of these rules. The three boilers (EU0010, EU0020 and EU0030) are limited to burn fuel oil with sulfur content of less than 0.5%; therefore, these boilers are exempt from the requirements of this rule.

2) 10 CSR 10-6.220, Restriction of Emission of Visible Air Contaminants is applicable to the installation, but has not been applied within this permit for the following emission units. Applicability of this regulation to the installation’s visible emissions sources is discussed in the following table:

<table>
<thead>
<tr>
<th>Emission Unit/Description</th>
<th>10 CSR 10-6.220 Applicability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Wide Internal Combustion Engines (Diesel and Natural Gas)</td>
<td>10 CSR 10-6.220(1)(A) exempts stationary internal combustion engines operated in the St. Louis metropolitan area.</td>
</tr>
<tr>
<td>Boiler #1, Boiler #2 and Boiler #3 (EU0010 through EU0030)</td>
<td>These Boilers are subject to 10 CSR 10-6.070 (40 CFR Part 60 Subpart Dc). According to 10 CSR 10-6.220(1)(H), emission units regulated by 10 CSR 10-6.070 are not subject to this rule.</td>
</tr>
<tr>
<td>Boiler #5 (EU0040) which is not subject to 10 CSR 10-6-070 (During Natural Gas Firing)</td>
<td>This boiler is subject to this regulation. However, emission units combusting natural gas are assumed to be in compliance with this regulation without any monitoring.</td>
</tr>
<tr>
<td>Facility-Wide Cooling Towers</td>
<td>The regulation is applicable to the cooling towers, but was not applied within this permit. The cooling towers during normal operation emit little or no visible emissions. The cooling towers can emit large amounts of water vapor which make it difficult to determine if/how much visible contaminant is being emitted. The Air Pollution Control Program is not requiring any monitoring, record keeping, or reporting for the cooling towers at this time; but, should visible emissions become an issue, these requirements may be added in the future.</td>
</tr>
</tbody>
</table>

3) 10 CSR 10-6.400, Restriction of Emission of Particulate Matter From Industrial Processes.
   a) According to 10 CSR 10-6.400(1)(A)14., this rule is not applicable to maintenance paint booth, because the coating operation is equipped with a control system designed to control at least ninety-five percent (95%) of the particulate overspray provided the system is operated and maintained in accordance with manufacturers' specifications or comparable maintenance procedures that meet or exceed manufacturers' specifications.

   According to 10 CSR 10-6.400(1)(A)8., this rule is also not applicable to the grind booths or cell exhausts, because these emission units are exempt from construction permitting under 10 CSR 10-6.061(3)(A)2L.

   b) The boilers and miscellaneous combustion equipment which operate on natural gas, fuel oil #2, or coal for indirect heating are exempt per 10 CSR 10-6.400(1)(B)6. The internal combustion engines (on the emergency generators) are not subject to this rule because the definition of process weight rate excludes liquids and gases that are used solely as fuels and air introduced for the purposes of combustion. The cooling towers are also exempt from this regulation per 10 CSR 10-6.400 (1)(B)7 because they are sources of fugitive emissions.
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 APCP a schedule for achieving compliance for that regulation(s).
Response to Public Comments

The draft Intermediate Operating Permit for Monsanto Company was placed on public notice as of April 6, 2018 for a 30-day comment period. The public notice was published on the Department of Natural Resources’ Air Pollution Control Program’s web page at: http://dnr.mo.gov/env/apcp/permit-public-notices.htm on Friday, April 6, 2018. The Air Pollution Control Program did not receive any public comments during the 30-day comment period.
MAY 17 2018

Mr. Oscar Berryman
Monsanto Company
800 North Lindbergh Blvd.
St. Louis, MO 63167

Re: Intermediate Operating Permit Renewal
Installation ID: 189-0020, Permit Number: OP2018-042

Dear Mr. Berryman:

Enclosed with this letter is your intermediate 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.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at http://dnr.mo.gov/regions/. The online CAV request can be found at http://dnr.mo.gov/cav/compliance.htm.

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 (30) days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If you send your appeal by registered or certified mail, we will deem it filed on the date you mailed it. If you send your appeal by a method other than registered or certified mail, we will deem it filed on the date the AHC receives it.

If you have any questions or need additional information regarding this permit, please do not hesitate to contact Berhanu Getahun at the St. Louis Regional Office, 7545 S. Lindbergh, Suite 210, St. Louis, MO 63125, or by telephone at (314) 416-2451. You may also contact me with 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

Enclosures

PAMS File: 2015-04-015