

Missouri Department of dnr.mo.gov  
**NATURAL RESOURCES**

Michael L. Parson, Governor

Carol S. Comer, Director

**MAY 21 2019**

Mr. Daniel S. Hedrick  
McCartney Generating Station  
5701 East Farm Road 112  
Strafford, MO 65757

Re: McCartney Generating Station, 077-0164  
Permit Number: 2018-04-037

Dear Mr. Hedrick:

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

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 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you have any questions or need additional information regarding this permit, please contact the Air Pollution Control Program (APCP) at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

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

MJS:lsr

Enclosures

c: PAMS File: 2018-04-037



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## PART 70 PERMIT TO OPERATE

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

**Operating Permit Number:** OP2019-015  
**Expiration Date:** MAY 21 2024  
**Installation ID:** 077-0164  
**Project Number:** 2018-04-037

**Installation Name and Address**

McCartney Generating Station  
5701 East Farm Road 112  
Strafford, MO 65757  
Greene County

**Parent Company's Name and Address**

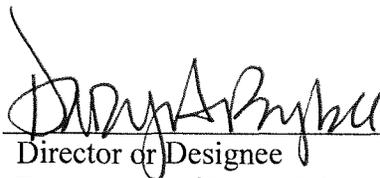
City Utilities of Springfield  
301 E. Central  
Springfield, MO 65801-0551

**Installation Description:**

The McCartney Generating Station provides peak generating capacity for the City Utilities of Springfield system and is located outside the city limits of Springfield in Greene county. Emission sources include four natural gas-fired turbine engines having the capacity to burn No.2 or distillate oil as backup fuel, fuel purging and venting, and a paved service road. The turbines are a major source of oxides of nitrogen and carbon monoxide emissions. Therefore, the installation is required to obtain a Part 70 operating permit. The installation is also required to have an Acid Rain Source Permit and a Clean Air Interstate Rule Source Permit for the turbines pursuant to Title IV and Title V of the Clean Air Act, respectively.

MAY 21 2019

Effective Date



Director or Designee  
Department of Natural Resources

## Table of Contents

|   |           |
|---|-----------|
| <b>I. INSTALLATION EQUIPMENT LISTING .....</b>  | <b>3</b>  |
| EMISSION UNITS WITH LIMITATIONS .....   | 3         |
| EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS .....   | 3         |
| <b>II. PLANT WIDE EMISSION LIMITATIONS.....</b>   | <b>4</b>  |
| <b>III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS .....</b>   | <b>5</b>  |
| E01 THROUGH E04—COMBUSTION TURBINES .....   | 5         |
| PERMIT CONDITION 001 .....  | 5         |
| 10 CSR 10-6.060 Construction Permits Required .....   | 5         |
| Construction Permit 072017-013, Issued July 21, 2017 .....  | 5         |
| PERMIT CONDITION 002 .....  | 8         |
| 10 CSR 10-6.070 New Source Performance Regulations .....  | 8         |
| 40 CFR Part 60, Subpart GG Standards of Performance for Stationary Gas Turbines .....                         | 8         |
| PERMIT CONDITION 003 .....  | 13        |
| 10 CSR 10-6.270 Acid Rain Source Permits Required .....   | 13        |
| PERMIT CONDITION 004 .....  | 13        |
| 10 CSR 10-6.360 Clean Air Interstate Rule Annual NO <sub>x</sub> Trading Program .....                        | 13        |
| 10 CSR 10-6.364 Clean Air Interstate Rule Seasonal NO <sub>x</sub> Trading Program .....                      | 13        |
| 10 CSR 10-6.366 Clean Air Interstate Rule SO <sub>x</sub> Trading Program .....                               | 13        |
| PERMIT CONDITION 005 .....  | 14        |
| 10 CSR 10-6.372 Cross-State Air Pollution Rule Annual NO <sub>x</sub> Trading Allowance Allocations .....     | 14        |
| 10 CSR 10-6.374 Cross-State Air Pollution Rule Ozone Season NO <sub>x</sub> Trading Allowance Allocations ... | 14        |
| 10 CSR 10-6.376 Cross-State Air Pollution Rule Annual SO <sub>2</sub> Trading Allowance Allocations .....     | 14        |
| 40 CFR Part 97, Subparts AAAAA, CCCCC, and EEEEE .....  | 14        |
| <b>IV. CORE PERMIT REQUIREMENTS .....</b>   | <b>27</b> |
| <b>V. GENERAL PERMIT REQUIREMENTS.....</b>  | <b>32</b> |
| <b>VI. ATTACHMENTS .....</b>  | <b>38</b> |
| ATTACHMENT A .....  | 39        |
| Notification of Startup, Shutdown, and Malfunction Events.....  | 39        |
| ATTACHMENT B.....   | 40        |
| Monthly NO <sub>x</sub> Emissions Tracking Record.....  | 40        |
| ATTACHMENT C.....   | 41        |
| Monthly CO Emissions Tracking Record.....   | 41        |
| ATTACHMENT D .....  | 42        |
| Monthly PM <sub>2.5</sub> Emissions Tracking Record .....   | 42        |
| ATTACHMENT E.....   | 43        |
| Acid Rain Permit .....  | 43        |
| ATTACHMENT F .....  | 49        |
| CAIR Permit .....   | 49        |
| ATTACHMENT G .....  | 54        |
| Quarterly/Semi-Annual Report Documentation For Exceedance and Monitor Downtime Periods .....                  | 54        |

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## I. Installation Equipment Listing

### EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation that emits air pollutants and that are identified as having unit-specific emission limitations.

| <u>Emission Unit #</u> | <u>Description of Emission Unit</u> |
|------------------------|-------------------------------------|
| E01                    | Combustion Turbine Engine 1A        |
| E02                    | Combustion Turbine Engine 1B        |
| E03                    | Combustion Turbine Engine 2A        |
| E04                    | Combustion Turbine Engine 2B        |

### EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

| <u>Description of Emission Source</u>      |
|--|
| Lavasol Water Treatment Tank 1, 25 gallons |
| Lavasol Water Treatment Tank 2, 25 gallons |
| Fuel Purging and Venting                   |
| Paved Service Haul Road                    |

## **II. Plant Wide Emission Limitations**

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

None.

### III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the CFR and 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.

| <b>E01 Through E04–Combustion Turbines<sup>1</sup></b> |   |                             |
|--|---|-----------------------------|
| <b>Emission Unit</b>                                   | <b>Description</b>  | <b>Manufacturer/Model #</b> |
| E01  | Combustion Turbine Engine 1A<br>Maximum Hourly Design Rate (MHDR)=265.30 MMBtu/hr (Natural Gas) and 272.00 MMBtu/hr (No.2 Fuel Oil) | Pratt and Whitney FT-8 Aero |
| E02  | Combustion Turbine Engine 1B<br>Maximum Hourly Design Rate (MHDR)=265.30 MMBtu/hr (Natural Gas) and 272.00 MMBtu/hr (No.2 Fuel Oil) | Pratt and Whitney FT-8 Aero |
| E03  | Combustion Turbine Engine 2A<br>Maximum Hourly Design Rate (MHDR)=265.30 MMBtu/hr (Natural Gas) and 272.00 MMBtu/hr (No.2 Fuel Oil) | Pratt and Whitney FT-8 Aero |
| E04  | Combustion Turbine Engine 2B<br>Maximum Hourly Design Rate (MHDR)=265.30 MMBtu/hr (Natural Gas) and 272.00 MMBtu/hr (No.2 Fuel Oil) | Pratt and Whitney FT-8 Aero |

<sup>1</sup>MMBtu/hr relates to million Btu per hour

**PERMIT CONDITION 001**  
 10 CSR 10-6.060 Construction Permits Required  
 Construction Permit 072017-013, Issued July 21, 2017

**Emissions Limitations:**

1. The permittee shall emit less than 250 tons of nitrogen oxides (NO<sub>x</sub>) combined from the four (4) turbine engines (E01-1A, E02-1B, E03-2A, E04-2B) in any consecutive twelve (12) month period. [Special Condition 2.A]
2. The permittee shall emit less than 250 tons of carbon monoxide (CO) combined from the four (4) turbine engines (E01-1A, E02-1B, E03-2A, E04-2B) in any consecutive twelve (12) month period. [Special Condition 2.B]
3. The permittee shall emit less than 11.43 tons of particulate matter having an aerodynamic diameter of 2.5 microns or less (PM<sub>2.5</sub>) combined from the four (4) turbine engines (E01-1A, E02-1B, E03-2A, E04-2B) in any consecutive twelve (12) month period. [Special Condition 2.C]
4. The permittee shall not emit NO<sub>x</sub> in excess of 45 pounds per hour (lb/hr) from each of the four (4) turbine engines (E01-1A, E02-1B, E03-2A, E04-2B). [Special Condition 3.A]
5. The permittee shall not emit CO in excess of 45 pounds per hour (lb/hr) from each of the four (4) turbine engines (E01-1A, E02-1B, E03-2A, E04-2B). [Special Condition 3.B]

**Operational Limitations:**

The permittee shall only combust fuel oil with a sulfur content of 0.05% by weight (or less) or natural gas in the four turbine engines (E01-1A, E02-1B, E03-2A, E04-2B). [Special Condition 7.A]

**Performance Testing:**

1. The permittee shall conduct performance tests to determine NO<sub>x</sub> and CO emission factors and show compliance with all emissions limitations excluding the consecutive 12-month PM<sub>2.5</sub> limitation. [Special Condition 4.A]
2. The permittee shall conduct performance testing semi-annually on all four turbine engines every year for NO<sub>x</sub>. Testing shall be performed once during the summer season (defined as March 1<sup>st</sup> through October 31<sup>st</sup>), as well as once during the winter season (defined as November 1<sup>st</sup> through February 28<sup>th</sup>). [Special Condition 4.B]
3. The permittee shall conduct performance testing semi-annually on all four turbine engines every five years for CO. Testing shall be performed once during the summer season (defined as March 1<sup>st</sup> through October 31<sup>st</sup>), as well as once during the winter season (defined as November 1<sup>st</sup> through February 28<sup>th</sup>). [Special Condition 4.C]
4. The permittee shall perform the testing using the same methodology as specified in 40 CFR Part 75, Appendix E. Appendix E only applies to NO<sub>x</sub> emissions. However, the same methodology shall be applied to CO testing. The permittee shall generate NO<sub>x</sub>-to-load curves and CO-to-load curves. [Special Condition 4.D]
5. The permittee shall optimize water- or steam-to-fuel ratio through performance testing at the various load conditions used for NO<sub>x</sub> and CO testing. Optimized means the water or steam injection rate is adjusted so that the NO<sub>x</sub> and CO hourly emissions are approximately equal under high load conditions. [Special Condition 4.G]
6. The permittee shall be exempt from testing any engine during the winter seasons that does not operate more than five (5) hours during the winter season. These operating hours shall be used exclusively for maintenance purposes. [Special Condition 5.A]
7. The permittee shall be exempt from testing any engine during the summer seasons that does not operate more than five (5) hours during the summer season. These operating hours shall be used exclusively for maintenance purposes. [Special Condition 5.B]
8. The permittee shall follow the procedure below if any of the turbine engines are operated more than five (5) operating hours each during the winter or summer season: [Special Condition 5.D]
  - a) The permittee must notify the Compliance/Enforcement Unit of the Air Pollution Control Program within ten (10) days of operating greater than five (5) hours on each of the turbine engines for the particular winter or summer season; and
  - b) The permittee shall conduct stack testing on each turbine that has operated greater than five (5) operating hours. The testing is to be coordinated with the Missouri Air Pollution Control Program's Enforcement Section and conducted during the winter or summer season in which the turbines are operated.
9. The permittee shall notify the Missouri Air Pollution Control Program's Compliance/Enforcement Section at least thirty (30) days prior to any planned testing event. If the planned testing protocols are changed from the previous performance tests, the permittee shall submit a new proposed Test Plan Form to [Stacktesting@dnr.mo.gov](mailto:Stacktesting@dnr.mo.gov) at least 30 days prior to the testing event. [Special Condition 4.F]

**Alternative Performance Testing Option:<sup>1</sup>**

1. The permittee may install, calibrate, maintain, and operate continuous emissions monitoring systems (CEMS) to monitor NO<sub>x</sub> and CO emissions and show compliance with hourly and consecutive 12-month emissions limitations in lieu of NO<sub>x</sub> and CO stack testing. The CEMs data shall be used for completion of Attachments B and C (or equivalent). [Special Condition 6.A]
2. The CEMS shall be designed according to specifications of 40 CFR 60, Appendix B. [Special Condition 6.B]
3. Quality assurance and control for the CEMs shall be ensured by compliance with 40 CFR 60, Appendix F, and a quarterly notice to the Department with dates of quarterly cylinder gas audits and the annual relative accuracy test audit. [Special Condition 6.C]

**Performance Testing in Case of Backup Fuel Use:**

1. The permittee shall perform one-time performance testing within 60 days of use of distillate fuel oil. Testing shall be used to determine emission factors for PM<sub>2.5</sub>, particulate matter having an aerodynamic diameter of ten (10) microns or less (PM<sub>10</sub>), particulate matter (PM), oxides of sulfur (SO<sub>x</sub>), NO<sub>x</sub>, CO, and volatile organic compounds (VOCs) in pounds per million Btu (lb/MMBtu). [Special Condition 8.A]
2. The permittee shall use methodology specified in 40 CFR Part 75 Appendix E for NO<sub>x</sub> and CO testing. Appendix E only applies to NO<sub>x</sub> emissions. However, the same methodology shall be applied to CO testing. The permittee shall generate NO<sub>x</sub>-to-load and CO-to-load curves. [Special Condition 8.B(1)]
3. The permittee shall submit a completed Proposed Test Plan Form to [Stacktesting@dnr.mo.gov](mailto:Stacktesting@dnr.mo.gov) at least 30 days prior to the testing event. The Proposed Test Plan Form may serve the purpose of notification and must be approved by the Director prior to conducting the required performance testing. [Special Condition 8.B(2)]
4. The permittee shall use PM<sub>10</sub> and SO<sub>x</sub> emission factors from stack testing to calculate the PM<sub>10</sub> and SO<sub>x</sub> annual emissions, taking into account the 11.43 tons per year (tpy) PM<sub>2.5</sub> and 250.0 tpy NO<sub>x</sub> and CO limits. If the conditioned potential emissions of PM<sub>10</sub> and SO<sub>x</sub> are greater than their respective *de minimis* levels of 15.0 ton/yr and 40 ton/yr, the permittee shall do one of the following: [Special Condition 8.D]
  - a) Request amendment of Permit No. 072017-013 to include a limit of 15.0 ton/yr of PM<sub>10</sub> and 40 ton/yr of SO<sub>x</sub> increase; or
  - b) Use modelling to show compliance with the NAAQS and increment standards for these pollutants.
5. The permittee shall use PM and VOC emission factors to calculate the PM and VOC annual emissions, taking into account the 11.43 tpy PM<sub>2.5</sub> and 250.0 tpy NO<sub>x</sub> and CO limits. If the potential emissions of PM and VOCs are greater than the major source level of 250 ton/yr, the permittee shall request amendment of Permit No. 072017-013 to include a 250 ton/yr limit for PM and VOCs. [Special Condition 8.E]

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<sup>1</sup> The installation has historically chosen to perform periodic stack testing using the methodology specified in Part 75, Appendix E to ensure compliance with applicable NO<sub>x</sub> and CO emission limitations and certain operational parameters, including fuel sulfur content and the ratio of water- or steam-to-fuel fired. An alternative to periodic performance testing may be chosen by the permittee using continuous emissions monitoring (CEM).

**Monitoring:**

The permittee shall use the PM<sub>2.5</sub>, NO<sub>x</sub>, and CO emission factors in Attachments B, C, and D, and equivalent calculation methodology, to demonstrate compliance with all consecutive 12-month emission limitations. [Special Conditions 2.D and 8.C]

**Reporting and Recordkeeping:**

1. The permittee shall maintain on-site records of operation for all four turbines to demonstrate, in the event of a seasonal testing exemption, that the applicable turbine engine(s) was/were operated no more than five (5) hours during the given season. The records shall include, at a minimum, the following information: [Special Condition 5.C]
  - a) The loading in megawatts (MW); and
  - b) The date and length of time each turbine operates at the specified loading.
2. The permittee shall demonstrate compliance with the fuel oil sulfur content limit, in the case fuel oil is burned, by obtaining records of the fuel's sulfur content from the vendor for each shipment of fuel received or by testing each shipment of fuel using the appropriate method specified in 10 CSR 10-6.040, *Reference Methods*. [Special Condition 7.B]
3. The permittee shall submit one electronic copy of a written report of any performance test results to [Stacktesting@dnr.mo.gov](mailto:Stacktesting@dnr.mo.gov) within 60 days of completion of any required testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required U.S. EPA Method for at least one sample run. The test report is to fully account for all operational and emission parameters addressed both in the permit conditions as well as in any other applicable state or federal rules or regulations. [Special Conditions 4.H, 4.I, 8.B(3), and 8.B(4)]
4. The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request [Special Condition 9.A]
5. The permittee shall submit a report to [Stacktesting@dnr.mo.gov](mailto:Stacktesting@dnr.mo.gov) no later than ten (10) days after the end of the month during which any record required by this permit shows an exceedance of a limitation imposed by this permit [Special Condition 9.B]
6. The permittee shall report any deviations from the monitoring, recordkeeping, and reporting requirements of this permit condition in the semi annual monitoring and annual compliance certification reports required by Section V of this permit.

**PERMIT CONDITION 002**

10 CSR 10-6.070 New Source Performance Regulations  
40 CFR Part 60, Subpart GG Standards of Performance for Stationary Gas Turbines

**Emission Limitations:**

**Nitrogen Oxides:**

1. The permittee shall not cause to be discharged into the atmosphere from any stationary gas turbine (E01 through E04), any gases which contain nitrogen oxides in excess of 0.0120 percent (%) by volume at 15 percent oxygen and on a dry basis. [40 CFR 60.332(a)(1)]<sup>2</sup>
2. Stationary gas turbines using water or steam injection for control of NO<sub>x</sub> emissions are exempt from the emission limitation when ice fog is deemed a traffic hazard by the permittee. [40 CFR 60.332(f)]

<sup>2</sup> This limitation is slightly different from that in Permit Project No. 2011-06-072. See Statement of Basis.

**Sulfur Dioxide:**

The permittee shall comply with one or the other of the following conditions: [40 CFR 60.333(a) or (b)]

1. The permittee shall not cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis; or
2. The permittee shall not burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 parts per million by weight, or ppmw).

**Monitoring:**

**Nitrogen Oxides:**

1. The permittee shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water- or steam-to-fuel being fired in all four turbines. [40 CFR 60.334(a)]
2. The permittee shall monitor steam- or water-to-fuel ratio during the performance test to establish acceptable values and ranges. The permittee may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. [40 CFR 60.334(g)]
3. The permittee shall monitor the nitrogen content of the fuel combusted in the turbines if the permittee claims an allowance for fuel bound nitrogen (i.e., if an F-value greater than zero is being used or will be used to calculate STD in §60.332). The nitrogen content of the fuel shall be determined using methods described in §60.335(b)(9) or an approved alternative. [40 CFR 60.334(h)(2)]
4. The permittee shall determine nitrogen content of the fuel according to the following frequencies:
  - a) *Fuel Oil*. If an emission allowance is being claimed for fuel-bound nitrogen, the nitrogen content shall be determined and recorded once per unit operating day. [40 CFR 60.334(i)(1)]
  - b) *Gaseous Fuel*. Any applicable nitrogen content value of the gaseous fuel shall be determined and recorded once per unit operating day. [40 CFR 60.334(i)(2)]

**Sulfur Dioxide:**

1. The permittee shall monitor the total sulfur content of the fuel being fired in the turbines, except as provided in §60.334(h)(3). The sulfur content of the fuel may be determined using total sulfur methods described in §60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86 (all of which are incorporated by reference-see §60.17), which measure the major sulfur compounds may be used. [40 CFR 60.334(h)(1)]
2. The permittee shall determine the sulfur content of the fuel according to the following frequencies:
  - a) *Fuel Oil*. For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2 and 2.2.4.3 of Appendix D to 40 CFR Part 75 (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank). [40 CFR 60.334(i)(1)]
  - b) *Gaseous Fuel*. For permittees that elect not to demonstrate sulfur content using options in §60.334(h)(3), and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded once per unit operating day. [40 CFR 60.334(i)(2)]

- i) Notwithstanding the requirements of paragraph §60.334 (i)(2), permittees or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in paragraphs §60.334(i)(3)(i) and (i)(3)(ii), custom schedules shall be substantiated with data and shall be approved by the Director before they can be used to comply with the standard in §60.333. [40 CFR 60.334(i)(3)]
- (1) The two custom sulfur monitoring schedules set forth in §60.334(i)(3)(i)(A) through (D) and in §60.334(i)(3)(ii) are acceptable, without prior Administrative approval: [40 CFR 60.334(i)(3)(i)]
- (a) The permittee shall obtain daily total sulfur content measurements for 30 consecutive unit operating days, using the applicable methods specified in Subpart GG. Based on the results of the 30 daily samples, the required frequency for subsequent monitoring of the fuel's total sulfur content shall be as specified in §60.334(i)(3)(i)(B), (C), or (D), as applicable.
- (b) If none of the 30 daily measurements of the fuel's total sulfur content exceeds 0.4 weight percent (4000 ppmw), subsequent sulfur content monitoring may be performed at 12 month intervals. If any of the samples taken at 12-month intervals has a total sulfur content between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), follow the procedures in §60.334(i)(3)(i)(C). If any measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in §60.334(i)(3)(i)(D).
- (c) If at least one of the 30 daily measurements of the fuel's total sulfur content is between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), but none exceeds 0.8 weight percent (8000 ppmw), then the permittee shall:
- (i) Collect and analyze a sample every 30 days for three months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in §60.334(i)(3)(i)(D). Otherwise, follow the procedures in §60.334(i)(3)(i)(C)(2); and
- (ii) Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in §60.334(i)(3)(i)(D). Otherwise, follow the procedures in §60.334(i)(3)(i)(C)(3).
- (iii) Begin monitoring at 12-month intervals. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in §60.334(i)(3)(i)(D). Otherwise, continue to monitor at this frequency.
- (d) If a sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), immediately begin daily monitoring according to §60.334(i)(3)(i)(A). Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur content no greater than 0.8 weight percent (8000 ppmw), are obtained. At that point, the applicable procedures of §60.334(i)(3)(i)(B) or (C) shall be followed.
- (2) The permittee may use the data collected from the 720-hour sulfur sampling demonstration described in section 2.3.6 of appendix D to 40 CFR Part 75 to determine a custom sulfur sampling schedule, as follows: [40 CFR 60.334(i)(3)(ii)]
- (a) If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 standard cubic feet (scf) (*i.e.*, the maximum total sulfur content of natural gas as defined in § 60.331(u)), no additional monitoring of the sulfur content of the gas is required.

- (b) If the maximum fuel sulfur content obtained from any of the 720 hourly samples exceeds 20 grains/100 scf, but none of the sulfur content values (when converted to weight percent sulfur) exceeds 0.4 weight percent (4000 ppmw), then the minimum required sampling frequency shall be one sample at 12 month intervals.
- (c) If any sample result exceeds 0.4 weight percent sulfur (4000 ppmw), but none exceeds 0.8 weight percent sulfur (8000 ppmw), follow the provisions of §60.334(i)(3)(i)(C).
- (d) If the sulfur content of any of the 720 hourly samples exceeds 0.8 weight percent (8000 ppmw), follow the provisions of §60.334(i)(3)(i)(D).

**Reporting and Recordkeeping:**

1. The permittee shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NO<sub>x</sub> emission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information shall be included in the monitoring plan. For affected units that are also subject to 40 CFR Part 75 and that use the low mass emissions methodology in §75.19 or the NO<sub>x</sub> emission measurement methodology in appendix E to 40 CFR Part 75, the permittee may meet the requirements of 60.334(g) by developing and keeping on-site (or at a central location for unmanned facilities) a quality-assurance plan as described in §75.19(e)(5) or in Section 2.3 of Appendix E and Section 1.3.6 of Appendix B to 40 CFR Part 75. [40 CFR 60.334(g)]
2. Notwithstanding the provisions of §60.334(h)(i), the permittee may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in §60.331(u), regardless of whether an existing custom schedule approved by the Director for Subpart GG requires such monitoring. The permittee shall use one of the following sources of information to make the required demonstration: [40 CFR 60.334(h)(3)]
  - a) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20 grains/100 scf or less; or
  - b) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D to 40 CFR Part 75 is required. [40 CFR 60.334(h)(3)]
3. For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content under Subpart GG, the permittee shall submit reports of excess emissions and monitoring downtime in accordance with §60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:
  - a) For turbines using water- or steam-to-fuel ratio monitoring: [40 CFR 60.334(j)(1)(i)]
    - i) An excess emission shall be any unit operating hour for which the average steam- or water-to-fuel ratio, as measured by the continuous monitoring system, falls outside the optimum steam- or water-to-fuel ratio established through performance testing. Any unit operating hour in which no water or steam is injected into the turbine shall also be considered an excess emission.

- ii) A period of monitor downtime shall be any unit operating hour in which water or steam is injected into the turbine, but the essential parametric data needed to determine the steam- or water-to-fuel ratio are unavailable or invalid.
  - iii) Each report shall include the average steam- or water-to-fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), gas turbine load, and (if applicable) the nitrogen content of the fuel during each excess emissions. The permittee does not have to report ambient conditions if the permittee opts to use the worst case ISO correction factor as specified in §60.334(b)(3)(ii), or if the permittee is not using the ISO correction equation under the provisions of §60.335(b)(1).
- b) If the permittee elects to take an emission allowance for fuel bound nitrogen, then excess emissions and periods of monitor downtime are as described in §60.334(j)(1)(ii)(A) and (B): [40 CFR 60.334(j)(1)(ii)]
- i) An excess emission shall be the period of time during which the fuel-bound nitrogen is greater than the value measured during the performance test required in §60.8 and used to determine the allowance.
  - ii) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour that a required sample is taken, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.
- c) If the permittee is required to monitor the sulfur content of the fuel under §60.334(h): [40 CFR 60.334(j)(2)]
- i) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.
  - ii) If the option to sample each delivery of fuel oil has been selected, the permittee shall immediately switch to one of the other oil sampling options (*i.e.*, daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.8 weight percent. The permittee shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and shall evaluate excess emissions according to §60.334(j)(2)(i). When all of the fuel from the delivery has been burned, the permittee may resume using the as-delivered sampling option.
  - iii) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.
4. *Ice Fog*. Each period during which an exemption provided in §60.332(f) is in effect shall be reported in writing to the Director quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. [40 CFR 60.334(j)(3)]
5. The permittee shall postmark all reports required under §60.7(c) by the 30<sup>th</sup> day following the end of each of six-month period. [40 CFR 60.334(j)(5)]
6. The permittee shall report any deviations from the monitoring, recordkeeping, and reporting requirements of this permit condition in the semi annual monitoring and annual compliance certification reports required by Section V of this permit.

**PERMIT CONDITION 003**

10 CSR 10-6.270 Acid Rain Source Permits Required

**Emission Limitations:**

1. The permittee shall obtain an Acid Rain Source Permit for E01 through E04 pursuant to Title IV of the Clean Air Act.
2. A Phase II Permit (Missouri Department of Natural Resources Project No. 2018-12-006, ORIS Code 7903) is being issued to the permittee in conjunction with this Title V permit. (See Attachment E) Sulfur dioxide (SO<sub>2</sub>) limitations are referenced in this existing Title IV: Phase II Acid Rain Permit for the installation.

**Monitoring, Reporting and Recordkeeping:**

1. The permittee shall retain the most current acid rain permit issued to this installation on-site and shall immediately make such permit available to any Department of Natural Resources' personnel upon request.
2. The permittee shall report any deviations from the monitoring, recordkeeping, and reporting requirements of this permit condition in the semi annual monitoring and annual compliance certification reports required by Section V of this permit.

**PERMIT CONDITION 004<sup>3</sup>**

10 CSR 10-6.360 Clean Air Interstate Rule Annual NO<sub>x</sub> Trading Program  
10 CSR 10-6.364 Clean Air Interstate Rule Seasonal NO<sub>x</sub> Trading Program  
10 CSR 10-6.366 Clean Air Interstate Rule SO<sub>x</sub> Trading Program

**Emission Limitations:**

1. The permittee shall obtain a CAIR Source Permit for the combustion turbines (E01 through E04).
2. A CAIR Permit (Missouri Department of Natural Resources Project No. 2018-12-008, ORIS Code 7903) is being issued to the permittee in conjunction with this Title V permit. (See Attachment F)

**Monitoring, Reporting and Recordkeeping:**

1. The permittee shall retain the most current CAIR permit issued to this installation on-site and shall immediately make such permit available to any Department of Natural Resources' personnel upon request.
2. The permittee shall report any deviations of the monitoring/recordkeeping requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

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<sup>3</sup> The Clean Air Interstate Rule (CAIR) has been replaced by the Cross State Air Pollution Rule (CSAPR), however a CAIR Permit is being issued to this installation because the CAIR regulations have not been removed from the Missouri State Implementation Plan (SIP) at this time. The permittee is not required to hold CAIR allowances and therefore no violation of CAIR is possible. Once the CAIR regulations are removed from the SIP and replaced with CSAPR, this permit condition will expire and the limitation thereof will no longer apply to the installation. No action on the part of the permittee is required to remove this permit condition from the operating permit

**PERMIT CONDITION 005**

10 CSR 10-6.372 Cross-State Air Pollution Rule Annual NO<sub>x</sub> Trading Allowance Allocations  
 10 CSR 10-6.374 Cross-State Air Pollution Rule Ozone Season NO<sub>x</sub> Trading Allowance Allocations  
 10 CSR 10-6.376 Cross-State Air Pollution Rule Annual SO<sub>2</sub> Trading Allowance Allocations  
 40 CFR Part 97, Subparts AAAAA, CCCCC, and EEEEE<sup>4</sup>

The CSAPR subject units, and the unit-specific monitoring provisions at this source are identified in the following table. These units are subject to the requirements for the CSAPR NO<sub>x</sub> Annual Trading Program, CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program, and CSAPR SO<sub>2</sub> Group 1 Trading Program.

| Parameter       | CEMS requirements pursuant to 40 CFR Part 75, Subpart B (for SO <sub>2</sub> monitoring) and 40 CFR Part 75, Subpart H (for NO <sub>x</sub> monitoring) | Optional monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D | Optional monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR Part 75, Appendix E | Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to §75.19 | EPA-approved alternative monitoring system requirements pursuant to 40 CFR Part 75, Subpart E |
|-----------------|---|---|---|---|---|
| SO <sub>2</sub> | N/A   | E01 through E04   | N/A   | N/A   | N/A   |
| NO <sub>x</sub> | N/A   | N/A   | E01 through E04   | N/A   | N/A   |
| Heat Input      | N/A   | E01 through E04   | N/A   | N/A   | N/A   |

1. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435 (CSAPR NO<sub>x</sub> Annual Trading Program), 97.830 through 97.835 (CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program), and 97.630 through 97.635 (CSAPR SO<sub>2</sub> Group 1 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR trading programs.
2. The permittee shall submit to the Director a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at <http://www.epa.gov/airmarkets/emissions/monitoringplans.html>.

<sup>4</sup> SOURCE: 76 FR 48379, August 8, 2011, as amended at 77 FR 10334, February 21, 2012; 77 FR 34844, June 12, 2012; 79 FR 71672, December 3, 2014; 81 FR 74604, October 26, 2016

3. If the permittee wants to use an alternative monitoring system, the permittee shall submit to the Director a petition requesting approval of the alternative monitoring system in accordance with 40 CFR Part 75, Subpart E and 40 CFR 75.66 and 97.435 (CSAPR NO<sub>x</sub> Annual Trading Program), 97.835 (CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program), and/or 97.635 (CSAPR SO<sub>2</sub> Group 1 Trading Program). The Director's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at <http://www.epa.gov/airmarkets/emissions/petitions.html>.
4. If the permittee wants to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (CSAPR NO<sub>x</sub> Annual Trading Program), 97.830 through 97.834 (CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program), and/or 97.630 through 97.634 (CSAPR SO<sub>2</sub> Group 1 Trading Program), the permittee shall submit to the Director a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (CSAPR NO<sub>x</sub> Annual Trading Program), 97.835 (CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program), and/or 97.635 (CSAPR SO<sub>2</sub> Group 1 Trading Program). The Director's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at <http://www.epa.gov/airmarkets/emissions/petitions.html>.
5. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (CSAPR NO<sub>x</sub> Annual Trading Program), 97.830 through 97.834 (CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program), and 97.630 through 97.634 (CSAPR SO<sub>2</sub> Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with §70.7(e)(2)(i)(B), may be used to add or change this unit's monitoring system description.

**CSAPR NO<sub>x</sub> Annual Trading Program Requirements:**

1. *Designated representative requirements.* The permittee shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§97.413 through 97.418. [§97.406(a)]
2. *Emissions monitoring, reporting, and recordkeeping requirements.* [§97.406(b)]
  - a) The permittee, and the designated representative, of each CSAPR NO<sub>x</sub> Annual source and each CSAPR NO<sub>x</sub> Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), §97.431 (initial monitoring system certification and recertification procedures), §97.432 (monitoring system out-of-control periods), §97.433 (notifications concerning monitoring), §97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and §97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements). [§97.406(b)(1)]
  - b) The emissions data determined in accordance with §§97.430 through 97.435 shall be used to calculate allocations of CSAPR NO<sub>x</sub> Annual allowances under §97.411(a)(2) and (b) and §97.412 and to determine compliance with the CSAPR NO<sub>x</sub> Annual emissions limitation and assurance provisions under §97.406(c), provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero. [§97.406(b)(2)]

3. *NO<sub>x</sub> emissions requirements.* [§97.406(c)]
- a) *CSAPR NO<sub>x</sub> Annual emissions limitation.* [§97.406(c)(1)]
- i) As of the allowance transfer deadline for a control period in a given year, the permittee shall hold, in the source's compliance account, CSAPR NO<sub>x</sub> Annual allowances available for deduction for such control period under §97.424(a) in an amount not less than the tons of total NO<sub>x</sub> emissions for such control period from all CSAPR NO<sub>x</sub> Annual units at the source. [§97.406(c)(1)(i)]
- ii) If total NO<sub>x</sub> emissions during a control period in a given year from the CSAPR NO<sub>x</sub> Annual units at a CSAPR NO<sub>x</sub> Annual source are in excess of the CSAPR NO<sub>x</sub> Annual emissions limitation set forth in §97.406(c)(1)(i), then: [§97.406(c)(1)(ii)]
- (1) The permittee shall hold the CSAPR NO<sub>x</sub> Annual allowances required for deduction under §97.424(d); and [§97.406(c)(1)(ii)(A)]
- (2) The permittee shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act. [§97.406(c)(1)(ii)(B)]
- b) *CSAPR NO<sub>x</sub> Annual assurance provisions.* [§97.406(c)(2)]
- i) If total NO<sub>x</sub> emissions during a control period in a given year from all CSAPR NO<sub>x</sub> Annual units at CSAPR NO<sub>x</sub> Annual sources in Missouri exceed the state assurance level, then the permittees of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO<sub>x</sub> emissions during such control period exceeds the common designated representative's assurance level for Missouri and such control period, shall hold (in the assurance account established for the permittees of such group) CSAPR NO<sub>x</sub> Annual allowances available for deduction for such control period under §97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Director in accordance with §97.425(b), of multiplying— [§97.406(c)(2)(i)]
- (1) The quotient of the amount by which the common designated representative's share of such NO<sub>x</sub> emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in Missouri for such control period, by which each common designated representative's share of such NO<sub>x</sub> emissions exceeds the respective common designated representative's assurance level; and [§97.406(c)(2)(i)(A)]
- (2) The amount by which total NO<sub>x</sub> emissions from all CSAPR NO<sub>x</sub> Annual units at CSAPR NO<sub>x</sub> Annual sources in Missouri for such control period exceed the state assurance level. [§97.406(c)(2)(i)(B)]
- ii) The permittee shall hold the CSAPR NO<sub>x</sub> Annual allowances required under §97.406(c)(2)(i), as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after the year of such control period. [§97.406(c)(2)(ii)]
- iii) Total NO<sub>x</sub> emissions from all CSAPR NO<sub>x</sub> Annual units at CSAPR NO<sub>x</sub> Annual sources in Missouri during a control period in a given year exceed the state assurance level if such total NO<sub>x</sub> emissions exceed the sum, for such control period, of Missouri NO<sub>x</sub> Annual trading budget under §97.410(a) and the state's variability limit under §97.410(b). [§97.406(c)(2)(iii)]

- iv) It shall not be a violation of 40 CFR Part 97, Subpart AAAAA or of the Clean Air Act if total NO<sub>x</sub> emissions from all CSAPR NO<sub>x</sub> Annual units at CSAPR NO<sub>x</sub> Annual sources in Missouri during a control period exceed the state assurance level or if a common designated representative's share of total NO<sub>x</sub> emissions from the CSAPR NO<sub>x</sub> Annual units at CSAPR NO<sub>x</sub> Annual sources in Missouri during a control period exceeds the common designated representative's assurance level. [§97.406(c)(2)(iv)]
- v) To the extent the permittee fails to hold CSAPR NO<sub>x</sub> Annual allowances for a control period in a given year in accordance with §97.406(c)(2)(i) through (iii), [§97.406(c)(2)(v)]
  - (1) The permittee shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and [§97.406(c)(2)(v)(A)]
  - (2) Each CSAPR NO<sub>x</sub> Annual allowance that the permittee fails to hold for such control period in accordance with §97.406(c)(2)(i) through (iii) and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act. [§97.406(c)(2)(v)(B)]
- c) *Compliance periods.* [§97.406(c)(3)]
  - i) A CSAPR NO<sub>x</sub> Annual unit shall be subject to the requirements under §97.406(c)(1) for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under §97.430(b) and for each control period thereafter. [§97.406(c)(3)(i)]
  - ii) A CSAPR NO<sub>x</sub> Annual unit shall be subject to the requirements under §97.406(c)(2) for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under §97.430(b) and for each control period thereafter. [§97.406(c)(3)(ii)]
- d) *Vintage of CSAPR NO<sub>x</sub> Annual allowances held for compliance.* [§97.406(c)(4)]
  - i) A CSAPR NO<sub>x</sub> Annual allowance held for compliance with the requirements under §97.406(c)(1)(i) for a control period in a given year must be a CSAPR NO<sub>x</sub> Annual allowance that was allocated or auctioned for such control period or a control period in a prior year. [§97.406(c)(4)(i)]
  - ii) A CSAPR NO<sub>x</sub> Annual allowance held for compliance with the requirements under §97.406(c)(1)(ii)(A) and (2)(i) through (iii) for a control period in a given year must be a CSAPR NO<sub>x</sub> Annual allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year. [§97.406(c)(4)(ii)]
- e) *Allowance Management System requirements.* Each CSAPR NO<sub>x</sub> Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart AAAAA. [§97.406(c)(5)]
- f) *Limited authorization.* A CSAPR NO<sub>x</sub> Annual allowance is a limited authorization to emit one ton of NO<sub>x</sub> during the control period in one year. Such authorization is limited in its use and duration as follows: [§97.406(c)(6)]
  - i) Such authorization shall only be used in accordance with the CSAPR NO<sub>x</sub> Annual Trading Program; and [§97.406(c)(6)(i)]
  - ii) Notwithstanding any other provision of 40 CFR Part 97, the Director has the authority to terminate or limit the use and duration of such authorization to the extent the Director determines is necessary or appropriate to implement any provision of the Clean Air Act. [§97.406(c)(6)(ii)]
- g) *Property right.* A CSAPR NO<sub>x</sub> Annual allowance does not constitute a property right. [§97.406(c)(7)]

4. *Title V permit revision requirements.* [§97.406(d)]
  - a) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO<sub>x</sub> Annual allowances in accordance with 40 CFR Part 97, Subpart AAAAA. [§97.406(d)(1)]
  - b) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to §§97.430 through 97.435, and the requirements for a CEMS (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to §75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with this paragraph and §70.7(e)(2)(i)(B). [§97.406(d)(2)]
5. *Additional recordkeeping and reporting requirements.* [§97.406(e)]
  - a) Unless otherwise provided, the permittee shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of five years from the date the document is created. This period may be extended for cause, at any time before the end of five years, in writing by the Director. [§97.406(e)(1)]
    - i) The certificate of representation under §97.416 for the designated representative for the source and each CSAPR NO<sub>x</sub> Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under §97.416 changing the designated representative. [§97.406(e)(1)(i)]
    - ii) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart AAAAA. [§97.406(e)(1)(ii)]
    - iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO<sub>x</sub> Annual Trading Program. [§97.406(e)(1)(iii)]
  - b) The designated representative of a CSAPR NO<sub>x</sub> Annual source and each CSAPR NO<sub>x</sub> Annual unit at the source shall make all submissions required under the CSAPR NO<sub>x</sub> Annual Trading Program, except as provided in §97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Part 70. [§97.406(e)(2)]
6. *Liability.* [§97.406(f)]
  - a) Any provision of the CSAPR NO<sub>x</sub> Annual Trading Program that applies to a CSAPR NO<sub>x</sub> Annual source or the designated representative of a CSAPR NO<sub>x</sub> Annual source shall also apply to the permittee. [§97.406(f)(1)]
  - b) Any provision of the CSAPR NO<sub>x</sub> Annual Trading Program that applies to a CSAPR NO<sub>x</sub> Annual unit or the designated representative of a CSAPR NO<sub>x</sub> Annual unit shall also apply to the permittee. [§97.406(f)(2)]
7. *Effect on other authorities.* No provision of the CSAPR NO<sub>x</sub> Annual Trading Program or exemption under §97.405 shall be construed as exempting or excluding the permittee, and the designated representative, from compliance with any other provision of the Missouri's state implementation plan, a federally enforceable permit, or the Clean Air Act. [§97.406(g)]

**CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program Requirements:**

1. *Designated representative requirements.* The permittee shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§97.813 through 97.818. [§97.806(a)]
2. *Emissions monitoring, reporting, and recordkeeping requirements.* [§97.806(b)]
  - a) The permittee, and the designated representative, of each CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), §97.831 (initial monitoring system certification and recertification procedures), §97.832 (monitoring system out-of-control periods), §97.833 (notifications concerning monitoring), §97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and §97.835 (petitions for alternatives to monitoring, recordkeeping, and reporting requirements). [§97.806(b)(1)]
  - b) The emissions data determined in accordance with §§97.830 through 97.835 shall be used to calculate allocations of CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances under §§97.811(a)(2) and (b) and §97.812 and to determine compliance with the CSAPR NO<sub>x</sub> Ozone Season Group 2 emissions limitation and assurance provisions under §97.806(c), provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero. [§97.806(b)(2)]
3. *NO<sub>x</sub> emissions requirements—* [§97.806(c)]
  - a) *CSAPR NO<sub>x</sub> Ozone Season Group 2 emissions limitation.* [§97.806(c)(1)]
    - i) As of the allowance transfer deadline for a control period in a given year, the permittee shall hold, in the source's compliance account, CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances available for deduction for such control period under §97.824(a) in an amount not less than the tons of total NO<sub>x</sub> emissions for such control period from all CSAPR NO<sub>x</sub> Ozone Season Group 2 units at the source. [§97.806(c)(1)(i)]
    - ii) If total NO<sub>x</sub> emissions during a control period in a given year from the CSAPR NO<sub>x</sub> Ozone Season Group 2 units at a CSAPR NO<sub>x</sub> Ozone Season Group 2 source are in excess of the CSAPR NO<sub>x</sub> Ozone Season Group 2 emissions limitation set forth in §97.806(c)(1)(i), then: [§97.806(c)(1)(ii)]
      - (1) The permittee shall hold the CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances required for deduction under §97.824(d); and [§97.806(c)(1)(ii)(A)]
      - (2) The permittee shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act. [§97.806(c)(1)(ii)(B)]

- b) *CSAPR NO<sub>x</sub> Ozone Season Group 2 assurance provisions.* [§97.806(c)(2)]
- i) If total NO<sub>x</sub> emissions during a control period in a given year from all base CSAPR NO<sub>x</sub> Ozone Season Group 2 units at base CSAPR NO<sub>x</sub> Ozone Season Group 2 sources in Missouri exceed the state assurance level, then the permittees of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO<sub>x</sub> emissions during such control period exceeds the common designated representative's assurance level for Missouri and such control period, shall hold (in the assurance account established for the permittees of such group) CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances available for deduction for such control period under §97.825(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Director in accordance with §97.825(b), of multiplying— [§97.806(c)(2)(i)]
    - (1) The quotient of the amount by which the common designated representative's share of such NO<sub>x</sub> emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the Missouri for such control period, by which each common designated representative's share of such NO<sub>x</sub> emissions exceeds the respective common designated representative's assurance level; and [§97.806(c)(2)(i)(A)]
    - (2) The amount by which total NO<sub>x</sub> emissions from all base CSAPR NO<sub>x</sub> Ozone Season Group 2 units at base CSAPR NO<sub>x</sub> Ozone Season Group 2 sources in Missouri for such control period exceed the state assurance level. [§97.806(c)(2)(i)(B)]
  - ii) The permittee shall hold the CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances required under §97.806(c)(2)(i), as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after the year of such control period. [§97.806(c)(2)(ii)]
  - iii) Total NO<sub>x</sub> emissions from all base CSAPR NO<sub>x</sub> Ozone Season Group 2 units at base CSAPR NO<sub>x</sub> Ozone Season Group 2 sources in Missouri during a control period in a given year exceed the state assurance level if such total NO<sub>x</sub> emissions exceed the sum, for such control period, of the Missouri NO<sub>x</sub> Ozone Season Group 2 trading budget under §97.810(a) and the state's variability limit under §97.810(b). [§97.806(c)(2)(iii)]
  - iv) It shall not be a violation of 40 CFR Part 97, Subpart EEEEE or of the Clean Air Act if total NO<sub>x</sub> emissions from all base CSAPR NO<sub>x</sub> Ozone Season Group 2 units at base CSAPR NO<sub>x</sub> Ozone Season Group 2 sources in Missouri during a control period exceed the state assurance level or if a common designated representative's share of total NO<sub>x</sub> emissions from the base CSAPR NO<sub>x</sub> Ozone Season Group 2 units at base CSAPR NO<sub>x</sub> Ozone Season Group 2 sources in Missouri during a control period exceeds the common designated representative's assurance level. [§97.806(c)(2)(iv)]
  - v) To the extent the permittee fails to hold CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances for a control period in a given year in accordance with §97.806(c)(2)(i) through (iii), [§97.806(c)(2)(v)]
    - (1) The permittee shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and [§97.806(c)(2)(v)(A)]
    - (2) Each CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance that the permittee fails to hold for such control period in accordance with §97.806(c)(2)(i) through (iii) and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act. [§97.806(c)(2)(v)(B)]

- c) *Compliance periods.* [§97.806(c)(3)]
    - i) A CSAPR NO<sub>x</sub> Ozone Season Group 2 unit shall be subject to the requirements under §97.806(c)(1) for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under §97.830(b) and for each control period thereafter. [§97.806(c)(3)(i)]
    - ii) A base CSAPR NO<sub>x</sub> Ozone Season Group 2 unit shall be subject to the requirements under §97.806(c)(2) for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under §97.830(b) and for each control period thereafter. [§97.806(c)(3)(ii)]
  - d) *Vintage of CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances held for compliance.* [§97.806(c)(4)]
    - i) A CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance held for compliance with the requirements under §97.806(c)(1)(i) for a control period in a given year must be a CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance that was allocated or auctioned for such control period or a control period in a prior year. [§97.806(c)(4)(i)]
    - ii) A CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance held for compliance with the requirements under §97.806(c)(1)(ii)(A) and (c)(2)(i) through (iii) for a control period in a given year must be a CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year. [§97.806(c)(4)(ii)]
  - e) *Allowance Management System requirements.* Each CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart EEEEE. [§97.806(c)(5)]
  - f) *Limited authorization.* A CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance is a limited authorization to emit one ton of NO<sub>x</sub> during the control period in one year. Such authorization is limited in its use and duration as follows: [§97.806(c)(6)]
    - i) Such authorization shall only be used in accordance with the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program; and [§97.806(c)(6)(i)]
    - ii) Notwithstanding any other provision of 40 CFR Part 97, Subpart EEEEE, the Director has the authority to terminate or limit the use and duration of such authorization to the extent the Director determines is necessary or appropriate to implement any provision of the Clean Air Act. [§97.806(c)(6)(ii)]
  - g) *Property right.* A CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance does not constitute a property right. [§97.806(c)(7)]
4. *Title V permit requirements.* [§97.806(d)]
- a) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances in accordance with 40 CFR Part 97, Subpart EEEEE. [§97.806(d)(1)]
  - b) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to §§97.830 through 97.835, and the requirements for a CEMS (pursuant to 40 CFR Part 75, Subpart H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to §75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with this paragraph, §70.7(e)(2)(i)(B), and §71.7(e)(1)(i)(B). [§97.806(d)(2)]

5. *Additional recordkeeping and reporting requirements.* [§97.806(e)]
- a) Unless otherwise provided, the permittee shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of five years from the date the document is created. This period may be extended for cause, at any time before the end of five years, in writing by the Director. [§97.806(e)(1)]
    - i) The certificate of representation under §97.816 for the designated representative for the source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under §97.816 changing the designated representative. [§97.806(e)(1)(i)]
    - ii) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart EEEEE. [§97.806(e)(1)(ii)]
    - iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program. [§97.806(e)(1)(iii)]
  - b) The designated representative of a CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program, except as provided in §97.818. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Part 70. [§97.806(e)(2)]
6. *Liability.* [§97.806(f)]
- a) Any provision of the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program that applies to a CSAPR NO<sub>x</sub> Ozone Season Group 2 source or the designated representative of a CSAPR NO<sub>x</sub> Ozone Season Group 2 source shall also apply to the permittee. [§97.806(f)(1)]
  - b) Any provision of the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program that applies to a CSAPR NO<sub>x</sub> Ozone Season Group 2 unit or the designated representative of a CSAPR NO<sub>x</sub> Ozone Season Group 2 unit shall also apply to the permittee. [§97.806(f)(2)]
7. *Effect on other authorities.* No provision of the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program or exemption under §97.805 shall be construed as exempting or excluding the permittee, and the designated representative, of a CSAPR NO<sub>x</sub> Ozone Season Group 2 source or CSAPR NO<sub>x</sub> Ozone Season Group 2 unit from compliance with any other provision of Missouri's approved State implementation plan, a federally enforceable permit, or the Clean Air Act. [§97.806(g)]

**CSAPR SO<sub>2</sub> Group 1 Trading Program Requirements:**

1. *Designated representative requirements.* The permittee shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§97.613 through 97.618. [§97.606(a)]

2. *Emissions monitoring, reporting, and recordkeeping requirements.* [§97.606(b)]
  - a) The permittee, and the designated representative, of each CSAPR SO<sub>2</sub> Group 1 source and each CSAPR SO<sub>2</sub> Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), §97.631 (initial monitoring system certification and recertification procedures), §97.632 (monitoring system out-of-control periods), §97.633 (notifications concerning monitoring), §97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and §97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements). [§97.606(b)(1)]
  - b) The emissions data determined in accordance with §§97.630 through 97.635 shall be used to calculate allocations of CSAPR SO<sub>2</sub> Group 1 allowances under §97.611(a)(2) and (b) and §97.612 and to determine compliance with the CSAPR SO<sub>2</sub> Group 1 emissions limitation and assurance provisions under §97.606(c), provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero. [§97.606(b)(2)]
3. *SO<sub>2</sub> emissions requirements.* [§97.606(c)]
  - a) *CSAPR SO<sub>2</sub> Group 1 emissions limitation.* [§97.606(c)(1)]
    - i) As of the allowance transfer deadline for a control period in a given year, the permittee shall hold, in the source's compliance account, CSAPR SO<sub>2</sub> Group 1 allowances available for deduction for such control period under §97.624(a) in an amount not less than the tons of total SO<sub>2</sub> emissions for such control period from all CSAPR SO<sub>2</sub> Group 1 units at the source. [§97.606(c)(1)(i)]
    - ii) If total SO<sub>2</sub> emissions during a control period in a given year from the CSAPR SO<sub>2</sub> Group 1 units at a CSAPR SO<sub>2</sub> Group 1 source are in excess of the CSAPR SO<sub>2</sub> Group 1 emissions limitation set forth in §97.606(c)(1)(i), then: [§97.606(c)(1)(ii)]
      - (1) The permittee shall hold the CSAPR SO<sub>2</sub> Group 1 allowances required for deduction under §97.624(d); and [§97.606(c)(1)(ii)(A)]
      - (2) The permittee shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR Part 97, Subpart CCCCC and the Clean Air Act. [§97.606(c)(1)(ii)(B)]
  - b) *CSAPR SO<sub>2</sub> Group 1 assurance provisions.* [§97.606(c)(2)]
    - i) If total SO<sub>2</sub> emissions during a control period in a given year from all CSAPR SO<sub>2</sub> Group 1 units at CSAPR SO<sub>2</sub> Group 1 sources in Missouri exceed the state assurance level, then the permittees of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO<sub>2</sub> emissions during such control period exceeds the common designated representative's assurance level for Missouri and such control period, shall hold (in the assurance account established for the permittee of such group) CSAPR SO<sub>2</sub> Group 1 allowances available for deduction for such control period under §97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Director in accordance with §97.625(b), of multiplying— [§97.606(c)(2)(i)]

- (1) The quotient of the amount by which the common designated representative's share of such SO<sub>2</sub> emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in Missouri for such control period, by which each common designated representative's share of such SO<sub>2</sub> emissions exceeds the respective common designated representative's assurance level; and  
[§97.606(c)(2)(i)(A)]
- (2) The amount by which total SO<sub>2</sub> emissions from all CSAPR SO<sub>2</sub> Group 1 units at CSAPR SO<sub>2</sub> Group 1 sources in Missouri for such control period exceed the state assurance level.  
[§97.606(c)(2)(i)(B)]
- ii) The permittee shall hold the CSAPR SO<sub>2</sub> Group 1 allowances required under §97.606(c)(2)(i), as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after the year of such control period. [§97.606(c)(2)(ii)]
- iii) Total SO<sub>2</sub> emissions from all CSAPR SO<sub>2</sub> Group 1 units at CSAPR SO<sub>2</sub> Group 1 sources in Missouri during a control period in a given year exceed the state assurance level if such total SO<sub>2</sub> emissions exceed the sum, for such control period, of the Missouri SO<sub>2</sub> Group 1 trading budget under §97.610(a) and the state's variability limit under §97.610(b).  
[§97.606(c)(2)(iii)]
- iv) It shall not be a violation of 40 CFR Part 97, Subpart CCCCC or of the Clean Air Act if total SO<sub>2</sub> emissions from all CSAPR SO<sub>2</sub> Group 1 units at CSAPR SO<sub>2</sub> Group 1 sources in Missouri during a control period exceed the state assurance level or if a common designated representative's share of total SO<sub>2</sub> emissions from the CSAPR SO<sub>2</sub> Group 1 units at CSAPR SO<sub>2</sub> Group 1 sources in the during a control period exceeds the common designated representative's assurance level. [§97.606(c)(2)(iv)]
- v) To the extent the permittee fails to hold CSAPR SO<sub>2</sub> Group 1 allowances for a control period in a given year in accordance with §97.606(c)(2)(i) through (iii), [§97.606(c)(2)(v)]
  - (1) The permittee shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and [§97.606(c)(2)(v)(A)]
  - (2) Each CSAPR SO<sub>2</sub> Group 1 allowance that the permittee fails to hold for such control period in accordance with §97.606(c)(2)(i) through (iii) and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart CCCCC and the Clean Air Act. [§97.606(c)(2)(v)(B)]
- c) *Compliance periods.* [§97.606(c)(3)]
  - i) A CSAPR SO<sub>2</sub> Group 1 unit shall be subject to the requirements under §97.606(c)(1) for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under §97.630(b) and for each control period thereafter.  
[§97.606(c)(3)(i)]
  - ii) A CSAPR SO<sub>2</sub> Group 1 unit shall be subject to the requirements under §97.606(c)(2) for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under §97.630(b) and for each control period thereafter.  
[§97.606(c)(3)(ii)]
- d) *Vintage of CSAPR SO<sub>2</sub> Group 1 allowances held for compliance.* [§97.606(c)(4)]
  - i) A CSAPR SO<sub>2</sub> Group 1 allowance held for compliance with the requirements under §97.606(c)(1)(i) for a control period in a given year must be a CSAPR SO<sub>2</sub> Group 1 allowance that was allocated or auctioned for such control period or a control period in a prior year. [§97.606(c)(4)(i)]

- ii) A CSAPR SO<sub>2</sub> Group 1 allowance held for compliance with the requirements under §97.606(c)(1)(ii)(A) and (2)(i) through (iii) for a control period in a given year must be a CSAPR SO<sub>2</sub> Group 1 allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year. [§97.606(c)(4)(ii)]
- e) *Allowance Management System requirements.* Each CSAPR SO<sub>2</sub> Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart CCCCC. [§97.606(c)(5)]
- f) *Limited authorization.* A CSAPR SO<sub>2</sub> Group 1 allowance is a limited authorization to emit one ton of SO<sub>2</sub> during the control period in one year. Such authorization is limited in its use and duration as follows: [§97.606(c)(6)]
  - i) Such authorization shall only be used in accordance with the CSAPR SO<sub>2</sub> Group 1 Trading Program; and [§97.606(c)(6)(i)]
  - ii) Notwithstanding any other provision of 40 CFR Part 97, Subpart CCCCC, the Director has the authority to terminate or limit the use and duration of such authorization to the extent the Director determines is necessary or appropriate to implement any provision of the Clean Air Act. [§97.606(c)(6)(ii)]
- g) *Property right.* A CSAPR SO<sub>2</sub> Group 1 allowance does not constitute a property right. [§97.606(c)(7)]
- 4. *Title V permit revision requirements.* [§97.606(d)]
  - a) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR SO<sub>2</sub> Group 1 allowances in accordance with 40 CFR Part 97, Subpart CCCCC. [§97.606(d)(1)]
  - b) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to §§97.630 through 97.635, and the requirements for a CEMS (pursuant to 40 CFR Part 75, Subpart B), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to §75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with this paragraph, §70.7(e)(2)(i)(B), and §71.7€(1)(i)(B). [§97.606(d)(2)]
- 5. *Additional recordkeeping and reporting requirements.* [§97.606(e)]
  - a) Unless otherwise provided, the permittee shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of five years from the date the document is created. This period may be extended for cause, at any time before the end of five years, in writing by the Director. [§97.606(e)(1)]
    - i) The certificate of representation under §97.616 for the designated representative for the source and each CSAPR SO<sub>2</sub> Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under §97.616 changing the designated representative. [§97.606(e)(1)(i)]
    - ii) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart CCCCC. [§97.606(e)(1)(ii)]

- iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR SO<sub>2</sub> Group 1 Trading Program. [§97.606(e)(1)(iii)]
  - b) The designated representative of a CSAPR SO<sub>2</sub> Group 1 source and each CSAPR SO<sub>2</sub> Group 1 unit at the source shall make all submissions required under the CSAPR SO<sub>2</sub> Group 1 Trading Program, except as provided in §97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Part 70. [§97.606(e)(2)]
6. *Liability.* [§97.606(f)]
- a) Any provision of the CSAPR SO<sub>2</sub> Group 1 Trading Program that applies to a CSAPR SO<sub>2</sub> Group 1 source or the designated representative of a CSAPR SO<sub>2</sub> Group 1 source shall also apply to the permittee. [§97.606(f)(1)]
  - b) Any provision of the CSAPR SO<sub>2</sub> Group 1 Trading Program that applies to a CSAPR SO<sub>2</sub> Group 1 unit or the designated representative of a CSAPR SO<sub>2</sub> Group 1 unit shall also apply to the permittee. [§97.606(f)(2)]
7. *Effect on other authorities.* No provision of the CSAPR SO<sub>2</sub> Group 1 Trading Program or exemption under §97.605 shall be construed as exempting or excluding the permittee, and the designated representative, from compliance with any other provision of Missouri's state implementation plan, a federally enforceable permit, or the Clean Air Act. [§97.606(g)]

## IV. Core Permit Requirements

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

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 make such permit available within a reasonable period of time to any Missouri Department of Natural Resources personnel upon request.

#### **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 pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.

#### **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 requirement 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. This odor evaluation shall be taken at a location outside of the installation's property boundary.

## **10 CSR 10-6.170**

### **Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin**

#### **Emission Limitation:**

1. The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the Director.
2. The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
3. Should it be determined that noncompliance has occurred, the Director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
  - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
  - b) Paving or frequent cleaning of roads, driveways and parking lots;
  - c) Application of dust-free surfaces;
  - d) Application of water; and
  - e) Planting and maintenance of vegetative ground cover.

## **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 10-6.280 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.

#### **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,

### Permit Duration and Extension of Expired Permits

#### 10 CSR 10-6.065(5)(C)1.B, 10 CSR 10-6.065(5)(E)3.C

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.

### General Record Keeping and Reporting Requirements

#### 10 CSR 10-6.065(5)(C)1.C

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 available within a reasonable period of time 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](mailto:AirComplianceReporting@dnr.mo.gov).
  - b) The permittee shall submit a report of all required monitoring by:
    - i) October 1st for monitoring which covers the January through June time period, and
    - ii) April 1st for monitoring which covers the July through December time period.
  - c) Each report shall identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
  - 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 (5)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the

- permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
- ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
  - iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual 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 deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

#### **Risk Management Plan Under Section 112(r)**

##### **10 CSR 10-6.065(5)(C)1.D**

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.

#### **Title IV Allowances**

##### **10 CSR 10-6.065(5)(C)1.E**

This permit prohibits emissions which exceed any allowances the installation holds under Title IV of the Clean Air Act.

No permit revisions shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program if the increases do not require a permit revision under any other applicable requirement.

Limits cannot be placed on the number of allowances that may be held by an installation. The installation may not use these allowances, however, as a defense for noncompliance with any other applicable requirement.

Any allowances held by a Title IV installation shall be accounted for according to procedures established in rules promulgated under Title IV of the Clean Air Act.

This facility is being issued a renewal of the acid rain permit (Permit Project No. 2018-12-006) along with this operating permit.

#### **Severability Clause**

##### **10 CSR 10-6.065(5)(C)1.F**

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

## **General Requirements**

### **10 CSR 10-6.065(5)(C)1.G**

1. The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
2. The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
3. The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
4. This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
5. The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(5)(C)1.

## **Incentive Programs Not Requiring Permit Revisions**

### **10 CSR 10-6.065(5)(C)1.H**

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

## **Reasonably Anticipated Operating Scenarios**

### **10 CSR 10-6.065(5)(C)1.I**

Alternative operating scenarios for the combustion of fuel oil in the combustion turbines are included in Permit Condition 001. The remaining permit conditions contain provisions for the combustion of natural gas and fuel oil in the turbines.

## **Compliance Requirements**

### **10 CSR 10-6.065(5)(C)3**

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 EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, as well as to the Missouri Department of Natural Resources' Air Pollution Control Program at [Stacktesting@dnr.mo.gov](mailto:Stacktesting@dnr.mo.gov). All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
- a) The identification of each term or condition of the permit that is the basis of the certification;
  - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
  - c) Whether compliance was continuous or intermittent;
  - d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
  - e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

### **Permit Shield**

#### **10 CSR 10-6.065(5)(C)6**

1. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
  - a) The applicable requirements are included and specifically identified in this permit, or
  - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
2. Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
  - a) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
  - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
  - c) The applicable requirements of the acid rain program,
  - d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or

- e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

### **Emergency Provisions**

#### **10 CSR 10-6.065(5)(C)7**

1. An emergency or upset as defined in 10 CSR 10-6.065(5)(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.

### **Operational Flexibility**

#### **10 CSR 10-6.065(5)(C)8**

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Missouri Department of Natural Resources' Air Pollution Control Program at [Stacktesting@dnr.mo.gov](mailto:Stacktesting@dnr.mo.gov) as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

1. Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), record keeping, reporting or compliance requirements of the permit.
  - a) Before making a change under this provision, The permittee shall provide advance written notice to the Missouri Department of Natural Resources' Air Pollution Control Program at [Stacktesting@dnr.mo.gov](mailto:Stacktesting@dnr.mo.gov), as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the APCP shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the APCP as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to

respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the APCP as soon as possible after learning of the need to make the change.

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

### **Off-Permit Changes**

#### **10 CSR 10-6.065(5)(C)9**

1. Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the permit, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
  - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
  - b) The permittee must provide contemporaneous written notice of the change to the Missouri Department of Natural Resources' Air Pollution Control Program at [Stacktesting@dnr.mo.gov](mailto:Stacktesting@dnr.mo.gov), as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(5)(B)3 of this rule. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
  - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
  - d) The permit shield shall not apply to these changes.

### **Responsible Official**

#### **10 CSR 10-6.020(2)(R)34**

The application utilized in the preparation of this permit was signed by Daniel S. Hedrick, Director-Environmental Affairs. 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.

### **Reopening-Permit for Cause**

#### **10 CSR 10-6.065(5)(E)6**

This permit shall be reopened for cause if:

1. The Missouri Department of Natural Resources (MoDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
2. 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,
3. Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
  - a) The permit has a remaining term of less than three years;
  - b) The effective date of the requirement is later than the date on which the permit is due to expire;or
  - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
4. The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
5. MoDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

### **Statement of Basis**

#### **10 CSR 10-6.065(5)(E)1.C**

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**  
 Notification of Startup, Shutdown, and Malfunction Events

**EXCESS EMISSIONS NOTIFICATION FORM**

CONTINUOUS EMISSIONS MONITORING EXCEEDANCE REPORT

Pursuant to 10 CSR 10-6.050, *Startup, Shutdown and Malfunction* and  
 40 CFR 60.7(c)(2), *Notification and Record Keeping* - FAX: 573-751-2706

|                            |                                       |  |          |
|----------------------------|---------------------------------------|--|----------|
| <b>Report Date:</b>        |                                       |  |          |
| <b>Source Name:</b>        | McCartney Generating Station          | <b>FIPS/Plant No.:</b>                 | 077-0164 |
| <b>Source Address:</b>     | 5701 East Farm Road 112, Stafford, MO |  |          |
| <b>Emission Point:</b>     |                                       | <b>Pollutant(s) Monitored (limit):</b> |          |
| <b>Responsible Person:</b> |                                       | <b>Phone No.:</b>                      |          |
| <b>Discovered by:</b>      |                                       |  |          |

|  |             |             |             |             |             |             |             |             |  |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|
| <b>Date(s) of Excess Emissions</b>           |             |             |             |             |             |             |             |             |  |
| <b>Date of Discovery</b>                     |             |             |             |             |             |             |             |             |  |
| <b>Total Source Operation Time (minutes)</b> |             |             |             |             |             |             |             |             |  |
| <b>Reason for Excess Emissions</b>           | <b>Code</b> | <b>Min.</b> | <b>Code</b> | <b>Min.</b> | <b>Code</b> | <b>Min.</b> | <b>Code</b> | <b>Min.</b> |  |
| Startup/Shutdown                             |             |             |             |             |             |             |             |             |  |
| Control Equipment Problems                   |             |             |             |             |             |             |             |             |  |
| Process Problems                             |             |             |             |             |             |             |             |             |  |
| Other Known Excess Emissions                 |             |             |             |             |             |             |             |             |  |
| Unknown Excess Emissions                     |             |             |             |             |             |             |             |             |  |
| Fuel Problems                                |             |             |             |             |             |             |             |             |  |
| Cleaning; Soot-Blowing                       |             |             |             |             |             |             |             |             |  |
| Percent Operating Time Above Standard        |             |             |             |             |             |             |             |             |  |

| <b>Date(s)</b> | <b>Code</b> | <b>Description of Event</b> | <b>Corrective Action Measures</b> |
|----------------|-------------|-----------------------------|-----------------------------------|
|                |             |                             |                                   |

|  |             |             |             |             |             |             |             |             |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Date(s) of Monitor Downtime</b>           |             |             |             |             |             |             |             |             |
| <b>Date of Discovery</b>                     |             |             |             |             |             |             |             |             |
| <b>Total Source Operation Time (minutes)</b> |             |             |             |             |             |             |             |             |
| <b>Reason for Monitor Downtime</b>           | <b>Code</b> | <b>Min.</b> | <b>Code</b> | <b>Min.</b> | <b>Code</b> | <b>Min.</b> | <b>Code</b> | <b>Min.</b> |
| CEM Equipment Malfunction                    |             |             |             |             |             |             |             |             |
| Non-CEM Equipment Malfunction                |             |             |             |             |             |             |             |             |
| Calibration (QA/QC)                          |             |             |             |             |             |             |             |             |
| Other Known CEM Downtime                     |             |             |             |             |             |             |             |             |
| Unknown CEM Downtime                         |             |             |             |             |             |             |             |             |
| Percent Operating Time Above Standard        |             |             |             |             |             |             |             |             |

| <b>Date(s)</b> | <b>Code</b> | <b>Description of Event</b> | <b>Corrective Action Measures</b> |
|----------------|-------------|-----------------------------|-----------------------------------|
|                |             |                             |                                   |

(Signature) \_\_\_\_\_







**Attachment E**  
Acid Rain Permit

## TITLE IV: ACID RAIN PERMIT

In accordance with Titles IV and V of the Clean Air Act and Missouri State Rule 10 CSR 10-6.270, *Acid Rain Permits Required*, the State of Missouri issues this Acid Rain Permit.

**Installation Name:** City Utilities McCartney Generating Station  
**ORIS Code:** 7903  
**Project Number:** 2018-12-006  
**Unit ID:** MGS1A, MGS1B, MGS2A, and MGS2B

The permit application submitted for this source, as corrected by the State of Missouri Department of Natural Resources (MDNR), Air Pollution Control Program (APCP), Operating Permit Section, is attached. The owners and operators of this source must comply with the standard requirements and special provisions set forth in this application.

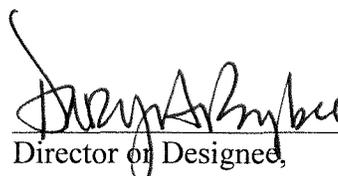
The number of allowances actually held by an affected source in a unit account may differ from the number allocated by the United States Environmental Protection Agency. Pursuant to 40 CFR 72.84, *Automatic permit amendment*, this does not necessitate a revision to any unit SO<sub>2</sub> allowance allocations identified in this permit.

These units have never burned coal, and are therefore not subject to the Nitrogen Oxides Emissions Reduction Program of the Acid Rain Program.

This Acid Rain Permit is being issued in conjunction with this operating permit and is effective for the same period of time as the operating permit. The permittee shall submit an application to renew this Acid Rain permit in conjunction with the operating permit renewal application.

MAY 21 2019

Date



Director of Designated,  
Department of Natural Resources



McCartney Generating Station  
Facility (Source) Name (from STEP 1)

Acid Rain - Page 2

### Permit Requirements

STEP 3

Read the standard requirements.

(1) The designated representative of each affected source and each affected unit at the source shall:

- (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
- (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:

- (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
- (ii) Have an Acid Rain Permit.

### Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

### Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

- (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
- (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

- (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
- (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

McCartney Generating Station  
Facility (Source) Name (from STEP 1)

Acid Rain - Page 3

### **Sulfur Dioxide Requirements, Cont'd.**

- STEP 3, Cont'd.
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
  - (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
  - (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
  - (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

### **Nitrogen Oxides Requirements**

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

### **Excess Emissions Requirements**

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

### **Recordkeeping and Reporting Requirements**

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
  - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

McCartney Generating Station  
Facility (Source) Name (from STEP 1)

Acid Rain - Page 4

**Recordkeeping and Reporting Requirements, Cont'd.**

STEP 3, Cont'd.

- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
  - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

**Liability**

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

**Effect on Other Authorities**

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating

McCartney Generating Station  
Facility (Source) Name (from STEP 1)

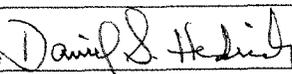
Acid Rain - Page 5

**Effect on Other Authorities, Cont'd.**

STEP 3, Cont'd. to applicable National Ambient Air Quality Standards or State Implementation Plans;  
(2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;  
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;  
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,  
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

**Certification**

STEP 4  
Read the certification statement, sign, and date.  
I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

|   |                |
|---|----------------|
| Name Daniel S. Hedrick, Director - Environmental Affairs                                      |                |
| Signature  | Date 4.16.2018 |

**Attachment F**  
CAIR Permit

## **TITLE V: CLEAN AIR INTERSTATE RULE (CAIR) PERMIT**

In accordance with Title V of the Clean Air Act and Missouri State Rule 10 CSR 10-6.362, *Clean Air Interstate Rule Annual NOx Trading Program*, 10 CSR 10-6.364, *Clean Air Interstate Rule Seasonal NOx Trading Program*, and 10 CSR 10-6.366, *Clean Air Interstate Rule SOx Trading Program*, the State of Missouri issues this Acid Rain Permit.

**Installation Name:** City Utilities McCartney Generating Station  
**ORIS Code:** 7903  
**Project Number:** 2018-12-008  
**Unit ID:** MGS1A, MGS1B, MGS2A, and MGS2B

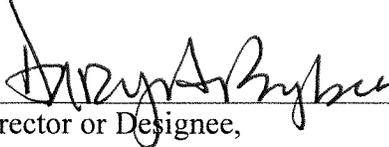
The permit application submitted for this source, as corrected by the State of Missouri Department of Natural Resources (MDNR), Air Pollution Control Program (APCP), Operating Permit Section, is attached. The owners and operators of this source must comply with the standard requirements and special provisions set forth in this application.

This CAIR Permit applies only to units MGS1A, MGS1B, MGS2A, and MGS2B at City Utilities-McCartney Generating Station (Facility ID 077-0164).

This CAIR permit is being issued in conjunction with this operating permit and is effective for the same period of time as the operating permit. The permittee shall submit an application to renew this CAIR permit in conjunction with the operating permit renewal application.

MAY 21 2019

Date

  
\_\_\_\_\_  
Director or Designee,  
Department of Natural Resources

# CAIR Permit Application

(for sources covered under a CAIR SIP)

Page 1

For more information, refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321, and 96.322

This submission is:  New  Revised for permit renewal

**STEP 1**  
 Identify the source by plant name, State, and ORIS or facility code

|            |                              |       |    |                    |      |
|------------|------------------------------|-------|----|--------------------|------|
| Plant Name | McCartney Generating Station | State | MO | ORIS/Facility Code | 7903 |
|------------|------------------------------|-------|----|--------------------|------|

**STEP 2**  
 Enter the unit ID# for each CAIR unit and indicate to which CAIR programs each unit is subject (by placing an "X" in the column)

| Unit ID# | NO <sub>x</sub> Annual              | SO <sub>2</sub>                     | NO <sub>x</sub> Ozone Season        |
|----------|-------------------------------------|-------------------------------------|-------------------------------------|
| MGS1A    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| MGS1B    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| MGS2A    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| MGS2B    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
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**STEP 3**  
 Read the standard requirements and the certification, enter the name of the CAIR designated representative, and sign and date

**Standard Requirements**

- (a) Permit Requirements.
  - (1) The CAIR designated representative of each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) required to have a title V operating permit at the source shall:
    - (i) Submit to the permitting authority a complete CAIR permit application under §96.122, §96.222, and §96.322 (as applicable) in accordance with the deadlines specified in §96.121, §96.221, and §96.321 (as applicable); and
    - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.
  - (2) The owners and operators of each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) required to have a title V operating permit at the source shall have a CAIR permit issued by the permitting authority under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for the source and operate the source and the unit in compliance with such CAIR permit.
  - (3) Except as provided in subpart II, III, and IIII (as applicable) of 40 CFR part 96, the owners and operators of a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) that is not otherwise required to have a title V operating permit and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) that is not otherwise required to have a title V operating permit are not required to submit a CAIR permit application, and to have a CAIR permit, under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for such CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and such CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable).

McCartney Generating Station  
Plant Name (from Step 1)

CAIR Permit Application  
Page 2

STEP 3,  
continued

(b) Monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) at the source shall comply with the monitoring, reporting, and recordkeeping requirements of subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(2) The emissions measurements recorded and reported in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 shall be used to determine compliance by each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) with the CAIR NO<sub>x</sub> emissions limitation, CAIR SO<sub>2</sub> emissions limitation, and CAIR NO<sub>x</sub> Ozone Season emissions limitation (as applicable) under paragraph (c) of §96.106, §96.206, and §96.306 (as applicable).

(c) Nitrogen oxides emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> allowances available for compliance deductions for the control period under §96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO<sub>x</sub> units at the source, as determined in accordance with subpart HH of 40 CFR part 96.

(2) A CAIR NO<sub>x</sub> unit shall be subject to the requirements under paragraph (c)(1) of §96.106 for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.170(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR NO<sub>x</sub> allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.106, for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> allowance was allocated.

(4) CAIR NO<sub>x</sub> allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Allowance Tracking System accounts in accordance with subparts FF, GG, and II of 40 CFR part 96.

(5) A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> Annual Trading Program. No provision of the CAIR NO<sub>x</sub> Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO<sub>x</sub> allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EE, FF, GG, or II of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> allowance to or from a CAIR NO<sub>x</sub> source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR NO<sub>x</sub> unit.

Sulfur dioxide emission requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO<sub>2</sub> allowances available for compliance deductions for the control period under §96.254(a) and (b) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO<sub>2</sub> units at the source, as determined in accordance with subpart HHH of 40 CFR part 96.

(2) A CAIR SO<sub>2</sub> unit shall be subject to the requirements under paragraph (c)(1) of §96.206 for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under §96.270(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR SO<sub>2</sub> allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.206, for a control period in a calendar year before the year for which the CAIR SO<sub>2</sub> allowance was allocated.

(4) CAIR SO<sub>2</sub> allowances shall be held in, deducted from, or transferred into or among CAIR SO<sub>2</sub> Allowance Tracking System accounts in accordance with subparts FFF, GGG, and III of 40 CFR part 96.

(5) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO<sub>2</sub> Trading Program. No provision of the CAIR SO<sub>2</sub> Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR SO<sub>2</sub> allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart FFF, GGG, or III of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR SO<sub>2</sub> unit.

Nitrogen oxides ozone season emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> Ozone Season allowances available for compliance deductions for the control period under §96.354(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO<sub>x</sub> Ozone Season units at the source, as determined in accordance with subpart HHHH of 40 CFR part 96.

(2) A CAIR NO<sub>x</sub> Ozone Season unit shall be subject to the requirements under paragraph (c)(1) of §96.306 for the control period starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.370(b)(1), (2), (3) or (7) and for each control period thereafter.

(3) A CAIR NO<sub>x</sub> Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.306, for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> Ozone Season allowance was allocated.

(4) CAIR NO<sub>x</sub> Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System accounts in accordance with subparts FFFF, GGGG, and IIII of 40 CFR part 96.

(5) A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> Ozone Season Trading Program. No provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.305 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO<sub>x</sub> allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EEEE, FFFF, GGGG, or IIII of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Ozone Season allowance to or from a CAIR NO<sub>x</sub> Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

McCartney Generating Station  
Plant Name (from Step 1)

CAIR Permit Application  
Page 3

STEP 3,  
continued

(d) Excess emissions requirements.

If a CAIR NO<sub>x</sub> source emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO<sub>x</sub> unit at the source shall surrender the CAIR NO<sub>x</sub> allowances required for deduction under §96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

If a CAIR SO<sub>2</sub> source emits sulfur dioxide during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation, then:

(1) The owners and operators of the source and each CAIR SO<sub>2</sub> unit at the source shall surrender the CAIR SO<sub>2</sub> allowances required for deduction under §96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

If a CAIR NO<sub>x</sub> Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> Ozone Season emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall surrender the CAIR NO<sub>x</sub> Ozone Season allowances required for deduction under §96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

(e) Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.

(i) The certificate of representation under §96.113, §96.213, and §96.313 (as applicable) for the CAIR designated representative for the source and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under §96.113, §96.213, and §96.313 (as applicable) changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96, provided that to the extent that subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable).

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) at the source shall submit the reports required under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable) including those under subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(f) Liability.

(1) Each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and each NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) shall meet the requirements of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable).

(2) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable) that applies to a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) or the CAIR designated representative of a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO<sub>x</sub> units, CAIR SO<sub>2</sub> units, and CAIR NO<sub>x</sub> Ozone Season units (as applicable) at the source.

(3) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable) that applies to a CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) shall also apply to the owners and operators of such unit.

McCartney Generating Station  
Plant Name (from Step 1)

CAIR Permit Application  
Page 4

STEP 3,  
continued

(g) Effect on Other Authorities.

No provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under § 96.105, §96.205, and §96.305 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) or CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

**Certification**

I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

|   |                |
|---|----------------|
| Name Daniel S. Hedrick, Director – Environmental Affairs                                    |                |
| Signature  | Date 12.5.2018 |

**Attachment G**

**Quarterly/Semi-Annual Report Documentation For Exceedance and Monitor Downtime**

Date: \_\_\_\_\_

**CONTINUOUS EMISSION MONITOR QUARTERLY REPORT  
 Combustion Turbine Exceedance/Downtime Summary**

Source Name: City Utilities of Springfield – McCartney Generating Station  
 CDS CNTY & SOURCE #: 26 077 00164  
 Reporting Quarter:  
 Due Date of Report:  
 Reporting Under: NSPS provisions 40 CFR 60.7(c)

|   | Total duration (hours)              |                   |                   |                   |
|---|-------------------------------------|-------------------|-------------------|-------------------|
|   | MGS1A<br>E01                        | MGS1B<br>E02      | MGS2A<br>E03      | MGS2B<br>E04      |
| Turbine #:  |                                     |                   |                   |                   |
| Emission Point:                                   |                                     |                   |                   |                   |
| Emission Unit:                                    | EU0001                              | EU0002            | EU0003            | EU0004            |
| Pollutant Monitored (Limit):                      | NOx<br>(100 tons)                   | NOx<br>(100 tons) | NOx<br>(100 tons) | NOx<br>(100 tons) |
| <b>Total Source Operation per Emission Point:</b> |                                     |                   |                   |                   |
| <b><u>REASON FOR EXCESS EMISSIONS</u></b>         | <b><u>Total Duration: hours</u></b> |                   |                   |                   |
| Startup/Shutdown (5/8)                            |                                     |                   |                   |                   |
| Control Equipment Problems (1)                    |                                     |                   |                   |                   |
| Process Problem (3)                               |                                     |                   |                   |                   |
| Other Known Causes (Excess Emission) (7)          |                                     |                   |                   |                   |
| Unknown Cause (4)                                 |                                     |                   |                   |                   |
| Fuel Problem (2)                                  |                                     |                   |                   |                   |
| Cleaning/Soot Blowing (6)                         |                                     |                   |                   |                   |
| Percent Operating Time Above Standard             |                                     |                   |                   |                   |
| Comments on Types of Problems:                    |                                     |                   |                   |                   |
| <b><u>REASON FOR CEMS DOWNTIME</u></b>            | <b><u>Total Duration: hours</u></b> |                   |                   |                   |
| Monitor Equipment Malfunction (01)                |                                     |                   |                   |                   |
| Non-monitor Equipment Malfunction (02)            |                                     |                   |                   |                   |
| Quality Assurance (03)                            |                                     |                   |                   |                   |
| Other Known Cause (Monitor Malfunction) (04)      |                                     |                   |                   |                   |
| Unknown Cause (Monitor Malfunction) (05)          |                                     |                   |                   |                   |
| Percent Operating Monitor Downtime                |                                     |                   |                   |                   |
| Comments on Monitor Problems:                     |                                     |                   |                   |                   |

Reported by: \_\_\_\_\_  
 Position Title: \_\_\_\_\_  
 Phone: \_\_\_\_\_

CONTINUOUS EMISSIONS MONITORING QUARTERLY REPORT  
NO. MONITORING SYSTEM DOWNTIME

City Utilities of Springfield, Missouri

SOURCE: McCartney Generating Station QUARTER      YEAR     

SOURCE OF EMISSIONS: Engine 1A, 1B, 2A or 2B

| <u>DATE</u>                             | <u>TIME</u> | <u>DURATION</u> | <u>REASON CODE</u> | <u>Comment(s)</u> |
|---|-------------|-----------------|--------------------|-------------------|
| <u>Combustion Turbine Engine No. 1A</u> |             |                 |                    |                   |
| <u>Combustion Turbine Engine No. 1B</u> |             |                 |                    |                   |
| <u>Combustion Turbine Engine No. 2A</u> |             |                 |                    |                   |
| <u>Combustion Turbine Engine No. 2B</u> |             |                 |                    |                   |
| TOTAL DOWNTIME                          |             |                 |                    |                   |

Submitted by: \_\_\_\_\_

Position Title: \_\_\_\_\_

**SUPPLEMENTAL EXCESS EMISSIONS DATA**  
MCCARTNEY GENERATING STATION  
COMBUSTION TURBINES

| DATE | HOUR<br>ENDING | HOURLY<br>AVERAGE<br>WATER: FUEL<br>RATIO | HOURLY<br>AVERAGE<br>WATER: FUEL<br>REQUIRED RATIO | HOURLY<br>AVERAGE FUEL<br>CONSUMPTION | UNIT<br>LOAD | AMBIENT<br>TEMP (°F) | NOTES |
|------|----------------|---|--|---------------------------------------|--------------|----------------------|-------|
|------|----------------|---|--|---------------------------------------|--------------|----------------------|-------|

ENGINE 1A

ENGINE 1B

ENGINE 2A

ENGINE 2B

Reported by: \_\_\_\_\_

## STATEMENT OF BASIS

### **Installation Description:**

Two “twin-pacs” comprised of four combustion turbines and two generators are used for conversion of fuel energy to electrical energy at the McCartney Generating Station. No federally enforceable control device(s) are used but water or steam injection is employed as a means to comply with federally enforceable emissions limitations on both an hourly and yearly scale. One-time performance test results from July, 2002 are used to ensure compliance with applicable PM<sub>2.5</sub> emissions limitations. The four combustion turbines have the capability to burn either natural gas or fuel oil. However, the turbines have never burned fuel oil since their installation. McCartney Generating Station is a named installation found in 10 CSR 10-6.020(3)(B), Table 2, Category 27 because it is a stationary source not included in Categories one (1) through twenty-six (26) and, as of August 7, 1980, is regulated under Section 111 of the Clean Air Act. For construction permitting, the installation is a synthetic minor source. For operating permitting, the installation is a major source for NO<sub>x</sub> and CO. The installation is located in Greene county, an attainment/unclassifiable area for all criteria pollutants.

### **Potential-To-Emit (PTE):**

Potential-To-Emit (PTE) is calculated in this operating permit for the four combustion turbines only. Although three pollutant types (PM<sub>2.5</sub>, NO<sub>x</sub>, and CO) emitted from the combustion turbines have either hourly or annual emission limitations, none of the limitations directly imply any bounds on the number of hours of uncontrolled annual operation. NO<sub>x</sub> and CO have hourly limitations of 45 lb/hr per turbine which, at 8760 hr/yr, result in total NO<sub>x</sub> and CO emissions greater than their respective annual limits of 250 ton/year. Using the emission factors in Table SB-1 for a distillate oil-fired turbine, all emission limits are reached under 35,040 hours of uncontrolled annual operation (8760 hrs per turbine). The lowest number of hours of uncontrolled annual operation allowed before reaching a limit burning distillate fuel was associated with PM<sub>2.5</sub> (limit reached at 7004 hours). Using the emission factors in Table SB-2 for burning natural gas, only the PM<sub>2.5</sub> limit is reached prior to exceedance of 35,040 hours of uncontrolled annual operation (limit reached at 13,216 hours).

The indirect operating hour limitation for distillate fuel use makes operation using natural gas the worst-case emissions scenario for VOC, formaldehyde, and total HAP emissions. In addition, the indirect operating hour limitation for distillate fuel makes operation using distillate fuel the worst-case emissions scenario for PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, SO<sub>x</sub>, and CO. The annual limitations for PM<sub>2.5</sub>, NO<sub>x</sub>, and CO are used as the conditioned Potential-To-Emit (PTE) for those pollutants. In regards to PM<sub>10</sub>, AP-42 Table 3.1-2a only includes values for primary PM, filterable PM, and condensable PM (water or steam injection). Since the 2002 testing event did not test under conditions when distillate/fuel oil was combusted, AP-42 values are the best available for calculations related to combustion of distillate/fuel oil. The PTE for PM<sub>10</sub> is equal to the PM<sub>2.5</sub> emission limit because the emission factors for PM<sub>10</sub> and PM<sub>2.5</sub> were both assumed equal to the primary PM emission factor in AP-42.

**Table SB-1**

| <i>Distillate Fuel Oil-Fired Turbines</i> |                       |                 |                              |  |
|---|-----------------------|-----------------|------------------------------|--|
| Pollutant                                 | Annual Limit (ton/yr) | MHDR (MMBtu/hr) | EF (lb/mmBtu) <sup>1,2</sup> | EF Source  |
| PM <sub>10</sub>                          | NA                    | 272             | 0.012                        | AP-42 Table 3.1-2a [Primary (filterable plus condensable) PM EF used as PM <sub>10</sub> and PM <sub>2.5</sub> EF, water or steam injection] |
| PM <sub>2.5</sub>                         | 11.43                 | 272             | 0.012                        |  |
| NO <sub>x</sub>                           | 250                   | 272             | 0.24                         | AP-42 Table 3.1-1 (water or steam injection)   |
| SO <sub>2</sub>                           | NA                    | 272             | 0.0505                       | AP-42 Table 3.1-2a (1.01S, S=0.05)   |
| CO  | 250                   | 272             | 0.076                        | AP-42 Table 3.1-1 (water or steam injection)   |
| VOC                                       | NA                    | 272             | 0.00041                      | AP-42 Table 3.1-2a (uncontrolled)  |
| 1,3 Butadiene                             | NA                    | 272             | 0.000016                     | AP-42 Table 3.1-4 (distillate oil)   |
| Benzene                                   | NA                    | 272             | 0.000055                     |  |
| Formaldehyde                              | NA                    | 272             | 0.00028                      |  |
| Naphthalene                               | NA                    | 272             | 0.000035                     |  |
| PAH                                       | NA                    | 272             | 0.00004                      |  |
| Total HAPs                                | NA                    | 272             | 0.000426                     |  |

1. EF relates to Emission Factor
  2. If fuel oil is used, stack testing will determine these emission factors, replacing the AP-42 emission factors. The SO<sub>2</sub> emission factor is for calculation of PTE only and is based on an oil sulfur content of 0.05%.
- \* NA relates to Not Applicable

**Table SB-2**

| <i>Natural Gas-Fired Turbines</i> |                       |                 |                 |       |                 |       |                 |       |                 |       |                                      |                       |
|-----------------------------------|-----------------------|-----------------|-----------------|-------|-----------------|-------|-----------------|-------|-----------------|-------|--------------------------------------|-----------------------|
| Pollutant                         | Annual Limit (ton/yr) | MHDR (MMBtu/hr) | E01             |       | E02             |       | E03             |       | E04             |       | Average WCEF <sup>3</sup> (lb/MMBtu) | WCEF Source           |
|                                   |                       |                 | WCEF (lb/MMBtu) | L (%) |                                      |                       |
| PM <sub>10</sub>                  | NA                    | 265.3           | 0.0052          | 50    | 0.0050          | 50    | 0.0097          | 50    | 0.0062          | 50    | 0.0065                               | <sup>4</sup> see note |
| PM <sub>2.5</sub>                 | 11.43                 | 265.3           | 0.0052          | 50    | 0.0050          | 50    | 0.0097          | 50    | 0.0062          | 50    | 0.0065                               | <sup>4</sup> see note |
| NO <sub>x</sub>                   | 250                   | 265.3           | 0.097           | 50    | 0.099           | 50    | 0.11            | 50    | 0.085           | 70    | 0.097                                | <sup>5</sup> see note |
| SO <sub>2</sub>                   | NA                    | 265.3           | 0.0034          | NA    | 0.0034          | NA    | 0.0034          | NA    | 0.0034          | NA    | 0.0034                               | <sup>6</sup> see note |
| CO                                | 250                   | 265.3           | 0.099           | 90    | 0.11            | 70    | 0.10            | 70    | 0.094           | 90    | 0.10                                 | <sup>5</sup> see note |
| VOC                               | NA                    | 265.3           | 0.014           | 100   | 0.0081          | 100   | 0.0022          | 75    | 0.0030          | 50    | 2.6E-03                              | <sup>4</sup> see note |
| 1,3 Butadiene                     | NA                    | 265.3           | NA              | NA    | NA              | NA    | NA              | NA    | NA              | NA    | 4.3E-07                              | <sup>7</sup> see note |
| Acetaldehyde                      | NA                    | 265.3           | NA              | NA    | NA              | NA    | NA              | NA    | NA              | NA    | 4.0E-05                              |                       |
| Acrolein                          | NA                    | 265.3           | NA              | NA    | NA              | NA    | NA              | NA    | NA              | NA    | 6.4E-06                              |                       |
| Benzene                           | NA                    | 265.3           | NA              | NA    | NA              | NA    | NA              | NA    | NA              | NA    | 1.2E-05                              |                       |
| Ethylbenzene                      | NA                    | 265.3           | NA              | NA    | NA              | NA    | NA              | NA    | NA              | NA    | 3.2E-05                              |                       |
| Formaldehyde                      | NA                    | 265.3           | 0.00096         | 75    | 0.00094         | 75    | 0.00066         | 100   | 0.00068         | 100   | 8.1E-04                              | <sup>4</sup> see note |
| Naphthalene                       | NA                    | 265.3           | NA              | NA    | NA              | NA    | NA              | NA    | NA              | NA    | 1.3E-06                              | <sup>7</sup> see note |
| PAH                               | NA                    | 265.3           | NA              | NA    | NA              | NA    | NA              | NA    | NA              | NA    | 2.2E-06                              |                       |
| Propylene Oxide                   | NA                    | 265.3           | NA              | NA    | NA              | NA    | NA              | NA    | NA              | NA    | 2.9E-05                              |                       |
| Toluene                           | NA                    | 265.3           | NA              | NA    | NA              | NA    | NA              | NA    | NA              | NA    | 1.3E-04                              |                       |
| Xylenes                           | NA                    | 265.3           | NA              | NA    | NA              | NA    | NA              | NA    | NA              | NA    | 6.4E-05                              |                       |
| Total HAPs                        | NA                    | 265.3           |                 |       |                 |       |                 |       |                 | 100   | 9.6E-04                              |                       |

1. WCEF relates to Worst Case Emission Factor
2. L relates to Loading
3. In the case an emission factor is not taken from a performance test, the average WCEF is the associated AP-42 factor.
4. July, 2002 performance test and installation-supplied fuel flow during the test (for particulates, PM<sub>10</sub> WCEF used for PM<sub>2.5</sub> WCEF)
5. August, 2018 Part 75, Appendix E performance test (subject to change based on twice annual testing).
6. AP-42 Table 3.1-2a, footnote h
7. AP-42 Table 3.1-3

**Air Pollutant Emissions, tons per year**

| Pollutants   | Annual Emissions Inventory Questionnaire (EIQ) |       |       |       |       | Updated and Conditioned PTE |
|--|--|-------|-------|-------|-------|-----------------------------|
|  | 2017   | 2016  | 2015  | 2014  | 2013  |                             |
| Particulate Matter<br>≤ Ten Microns (PM <sub>10</sub> )  | 1.83   | 1.62  | 1.17  | 1.39  | 1.06  | 11.43                       |
| Particulate Matter<br>≤ 2.5 Microns (PM <sub>2.5</sub> ) | 1.83   | 1.62  | 1.17  | 1.38  | 1.06  | <11.43 <sup>1</sup>         |
| Sulfur Oxides<br>(SO <sub>x</sub> )                      | 0.24   | 0.22  | 0.14  | 0.19  | 0.13  | 48.1 <sup>2</sup>           |
| Nitrogen Oxides<br>(NO <sub>x</sub> )                    | 43.55  | 38.69 | 31.35 | 42.50 | 25.85 | <250 <sup>1</sup>           |
| Volatile Organic<br>Compounds (VOC)                      | 1.20   | 1.04  | 0.63  | 0.71  | 0.85  | 4.49 <sup>3</sup>           |
| Carbon Monoxide<br>(CO)                                  | 37.46  | 34.39 | 23.50 | 34.34 | 20.50 | <250 <sup>1</sup>           |
| Formaldehyde (HCHO)                                      | 0.28   | 0.25  | 0.17  | 0.20  | 0.15  | 1.42 <sup>4,5</sup>         |
| Hazardous Air Pollutants<br>(HAPs)                       | 0.28   | 0.25  | 0.17  | 0.20  | 0.15  | 1.98 <sup>4,5</sup>         |

1. Permit No.072017-013 emission limitation
2. Computed using the MHDR for distillate/fuel oil (272 MMBtu/hr), an emission factor from AP-42 Table 3.1-2a (footnote h), and 7,004 hours of uncontrolled annual operation
3. Determined using the MHDR for natural gas (265.3 MMBtu/hr), the average of the worst-case emission factors from each turbine during the July 2002 performance test, and 13,216 hours of uncontrolled annual operation
4. AP-42 Table 3.1-3 emission factors are used for all HAPs with an exception to formaldehyde. The formaldehyde emission factor used was taken from the average of the worst-case HCHO emission factors from each turbine during the 2002 performance test. Other parameters used in the calculation include an MHDR of 265.3 MMBtu/hr (for natural gas) and 13,216 hours of uncontrolled annual operation.
5. The PTE for formaldehyde and HAPs in this table differs from the associated formaldehyde and HAPs PTE in Construction Permit No. 072017-013 for two reasons: 1) the formaldehyde and HAPs PTE in 072017-013 was evaluated at 35,040 hours of annual uncontrolled operation, whereas the formaldehyde and HAPs PTE in this table was evaluated at 13,216 hours of annual uncontrolled operation; and 2) 072017-013 uses the same emission factor for HAPs as it does for formaldehyde.

**Permit Reference Documents**

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

1. Part 70 Operating Permit Application, received April 24, 2018;
2. Year 2017 Emissions Inventory Questionnaire, received April 30, 2018;
3. Year 2016 Emissions Inventory Questionnaire, received March 23, 2017;
4. Year 2015 Emissions Inventory Questionnaire, received April 29, 2016;
5. Year 2014 Emissions Inventory Questionnaire, received April 29, 2015;
6. Year 2013 Emissions Inventory Questionnaire, received April 30, 2014;
7. Construction Permit 072017-013, issued July 21, 2017;
8. Acid Rain Permit application, Permit Project No. 2018-12-006;
9. CAIR Permit application, Permit Project No. 2018-12-008; and

10. U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition
11. Performance testing conducted in July, 2002 for NO<sub>x</sub>, CO, VOCs, HCHO, and PM<sub>10</sub>
12. Performance testing conducted in August, 2018 for 40 CFR Part 75, Appendix E compliance

### **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.

- 10 CSR 10-6.362 *Clean Air Interstate Rule Annual NO<sub>x</sub> Trading Program*
- 10 CSR 10-6.364 *Clean Air Interstate Rule Seasonal NO<sub>x</sub> Trading Program*
- 10 CSR 10-6.366 *Clean Air Interstate Rule SO<sub>2</sub> Trading Program*

The CAIR was replaced by the CSAPR on January 1, 2015 in the Federal Implementation Plan (FIP). However, it still remains in Missouri's State Implementation Plan (SIP). Therefore, all combustion turbines (E01 through E04) at this installation are subject to the CAIR-related regulations. A CAIR Permit application, Permit Project No. 2018-12-008, was received from the installation on December 7, 2018 by the Missouri Department of Natural Resources, as requested.

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

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

#### *10 CSR 10-6.220, Restriction of Emission of Visible Air Contaminants*

This rule does not apply to the combustion turbines as long as they exclusively burn natural gas. Internal combustion engines are also exempt from §6.220, however, the current definition of internal combustion engine in the Missouri Code of State Regulations (CSR) includes only piston engines. If the definition of internal combustion engine is not updated in the CSR to include turbine engines, and the turbines combust distillate/fuel oil, enforcement discretion is recommended. In regards to the paved service haul road, the rule is not applicable because fugitive emissions subject to 10 CSR 10-6.170 are exempt.

#### *10 CSR 10-6.260, Restriction of Emission of Sulfur Compounds*

This rule was rescinded on November 30, 2015 from the Missouri CSR although it still remains in the Missouri SIP. Upon adoption of 10 CSR 10-6.261 into Missouri's SIP, 10 CSR 10-6.260 will be removed from the SIP. The regulation does not apply to the combustion turbines because they are subject to an applicable sulfur compound emission limit under 10 CSR 10-6.070 (40 CFR 60, Subpart GG Standards of Performance for Stationary Gas Turbines). The rule does not apply to the paved service haul road because it is not a source of sulfur dioxide.

#### *10 CSR 10-6.261, Control of Sulfur Dioxide Emissions*

This Regulation has not yet been adopted into Missouri's SIP; therefore, this regulation is a state only requirement for applicable installations. Upon adoption into Missouri's SIP, this regulation will be both a state and federal requirement for applicable installations. This rule does not apply to the combustion turbines because 1) there is no applicable SO<sub>2</sub> emission limitation in 10 CSR 10-6.261, and 2) the combustion turbines are subject to a more restrictive fuel sulfur content limit under both 10 CSR 10-6.070 and Permit No. 072017-013.

10 CSR 10-6.350, *Emission Limitations and Emissions Trading of Oxides of Nitrogen*  
This regulation does not apply as long as NO<sub>x</sub> CAIR regulations apply.

10 CSR 10-6.100, *Alternate Emission Limits*  
This rule is not applicable because the installation is in an ozone attainment/unclassifiable area.

10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*  
This rule does not apply to the combustion turbines because liquid and gas fuels do not meet the definition of process weight. In addition, this rule does not apply to the paved service haul road because fugitive emissions are exempt.

### Construction Permit History

The following revisions were made to construction permits for this installation:

Construction Permit No. 072017-013 lists 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants* as an applicable regulation. However, this rule does not apply to the combustion turbines as long as they exclusively burn natural gas. Internal combustion engines are also exempt from §6.220, however, the current definition of internal combustion engine in the Missouri Code of State Regulations (CSR) includes only piston engines. If the definition of internal combustion engine is not updated in the CSR to include turbine engines, and the turbines combust distillate/fuel oil, enforcement discretion is recommended.

### New Source Performance Standards (NSPS) Applicability

40 CFR Part 60 Subpart GG, *Standards of Performance for Stationary Gas Turbines*

All combustion turbines (E01 through E04) at this installation are subject to this regulation. The associated applicable requirements are included in this operating permit under Permit Condition 002 (E01 through E04). The emissions limitation for nitrogen oxides as required by 40 CFR 60.332(a)(1) was calculated via the steps outlined below.

1. Compute Y, manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour):

$$Y = \left(265.3 \frac{\text{mmBtu}}{\text{hr}}\right) \left(\frac{1}{31 \text{ MW}}\right) \left(\frac{1 \text{ MW}}{1,000,000 \text{ W}}\right) \left(\frac{1,000,000 \text{ Btu}}{1 \text{ mmBtu}}\right) \left(\frac{1.055 \text{ kJ}}{1 \text{ Btu}}\right) = 9.03 \frac{\text{kJ}}{\text{W} * \text{hr}}$$

2. Determine STD, the allowable NO<sub>x</sub> emission concentration (percent by volume at 15 percent oxygen on a dry basis) with F, the NO<sub>x</sub> emission allowance for fuel-bound nitrogen equal to zero:

$$STD = 0.0075 \left( \frac{14.4 \frac{\text{kJ}}{\text{W} * \text{hr}}}{9.03 \frac{\text{kJ}}{\text{W} * \text{hr}}} \right) + 0 = 0.0120\% \frac{\text{v}}{\text{v}}$$

### Maximum Achievable Control Technology (MACT) Applicability

40 CFR Part 63 Subpart YYYY, *National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines*

This regulation does not apply to the combustion turbines (E01 through E04) at this installation because it is not a major source of Hazardous Air Pollutant emissions.

### **National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability**

In the permit application and according to APCP records, there was no indication that any Missouri Air Conservation Law, Asbestos Abatement, 643.225 through 643.250; 10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants, Subpart M, National Standards for Asbestos; and 10 CSR 10-6.250, Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption Requirements apply to this installation. The installation is subject to these regulations if they undertake any projects that deal with or involve any asbestos containing materials. None of the installation's operating projects underway at the time of this review deal with or involve asbestos containing material. Therefore, the above regulations were not cited in the operating permit. If the installation should undertake any construction or demolition projects in the future that deal with or involve any asbestos containing materials, the installation must follow all of the applicable requirements of the above rules related to that specific project.

### **Compliance Assurance Monitoring (CAM) Applicability**

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.

40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a federally enforceable control device to achieve compliance with a relevant standard. Water or steam injection is considered an operational parameter used to comply with federally enforceable emission limitations.

### **Greenhouse Gas Emissions**

Note that this source is subject to the Greenhouse Gas Reporting Rule. However, the preamble of the GHG Reporting Rule clarifies that Part 98 requirements do not have to be incorporated in Part 70 operating permits at this time. In addition, Missouri regulations do not require the installation to report CO<sub>2</sub> emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation's CO<sub>2</sub> emissions were not included within this permit. The applicant is required to report the data directly to EPA. The public may obtain CO<sub>2</sub> emissions data for this installation by visiting <http://epa.gov/ghgreporting/ghgdata/reportingdatasets.html>.

### **Other Regulatory Determinations**

None.

### **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 APCP'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 Part 70 Operating Permit for McCartney Generating Station (077-0164) was placed on public notice as of March 6, 2019 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-notice.htm>.

One comment was received from the applicant on April 3, 2019 during the public comment period that is included below for formalization purposes. The comment relates to Permit Condition 001, item 4.a). The applicant suggests replacement of "...limit of 15.0 ton/yr of PM<sub>10</sub>..." with "...increase of 15.0 ton/yr of PM<sub>10</sub>..."

### **Comment #: 001**

"Increase of 15 tpy, not a limit of 15 tpy. The CP condition says 15 tpy limit, however it should have said an increase rather than limit. Page 12 of the CP says PM<sub>10</sub> increase. Similar to PM<sub>2.5</sub> having a 10 tpy increase to a limit of 11.43. A de minimis increase above BAE was the project emissions, not a de minimis limit."

### **Response to Comment:**

The Air Pollution Control Program suggested an amendment of Construction Permit No. 072017-013, issued July 21, 2017 to reflect that the project emissions for PM<sub>10</sub> is a 15.0 ton/yr increase over PM<sub>10</sub> Baseline Actual Emissions (BAE). The applicant informed the Air Pollution Control Program that they will apply for an amendment to Construction Permit No. 072017-013 in the event fuel oil is fired in the turbines.