Commonwealth of Kentucky Energy and Environment Cabinet Department for Environmental Protection Division for Air Quality 300 Sower Boulevard, 2nd Floor Frankfort, Kentucky 40601 (502) 564-3999

Draft

AIR QUALITY PERMIT Issued under 401 KAR 52:020

Permittee Name: Paducah Power System (PPS)
Mailing Address: 1500 Broadway P.O. Box 180,

Paducah, KY 42002

Source Name: Paducah Power System (PPS), Power Plant No. 1

Mailing Address: 4801 Schneidman Road,

Paducah, KY 42003

Source Location: Same as above

Permit ID: V-23-038 Agency Interest #: 84744

Activity ID: APE20230001
Review Type: Title V, Operating
Source ID: 21-145-00096

Regional Office: Paducah Regional Office

130 Eagle Nest Drive Paducah, KY 42003 (270) 898-8468

County: McCracken

Application

Complete Date: December 7, 2023

Issuance Date: Expiration Date:

For Michael J. Kennedy, P.E. Director

Division for Air Quality

Version 4/1/2022

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Permit	Permit Type	Activity#	Complete Date	Issuance Date	Summary of Action
V-23-038	Renewal	APE20230001	12/7/2023		Renewal

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Energy and Environment Cabinet (Cabinet) hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit was issued under the provisions of Kentucky Revised Statutes (KRS) Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit 01

Two Natural Gas Combustion Turbines

Description:

One pair of turbines (EU-01a and EU-01b)

Heat input of 313 MMBtu/hr each at an ambient temperature of 59°F.

The turbines are operated in a simple cycle mode with a nominal package output of 60.3 MW at these conditions while utilizing inlet fogging.

Manufacturer & Model: Pratt and Whitney Power Systems FT8-3 SwiftPac 60

Control Device: Low NO_X burner and Water Injection System

Construction Date: October 15, 2009

Emission Unit 02

Two Natural Gas Combustion Turbines

Description:

One pair of turbines (EU-02a and EU-02b)

Heat input of 313 MMBtu/hr each at an ambient temperature of 59°F.

The turbines are operated in a simple cycle mode with a nominal package output of 60.3 MW at these conditions while utilizing inlet fogging.

Manufacturer & Model: Pratt and Whitney Power Systems FT8-3 SwiftPac 60

Control Device: Low NO_X burner and Water Injection System

Construction Date: October 15, 2009

APPLICABLE REGULATIONS:

40 CFR, Part 75, Continuous Emission Monitoring

401 KAR 51:240, *Cross-State Air Pollution Rule (CSAPR) NO_x annual trading program* (See Section L)

401 KAR 51:250, Cross-State Air Pollution Rule (CSAPR) NO_x ozone season group 2 trading program (See Section L)

401 KAR 51:260, Cross-State Air Pollution Rule (CSAPR) SO₂ group 1 trading program (See Section L)

401 KAR 51:160, NO_x requirements for large utility and industrial boilers

401 KAR 51:210, *CAIR NO_x annual trading program* (See Section K)

401 KAR 51:220, CAIR NO_x ozone season trading program (See Section K)

401 KAR 51:230, *CAIR SO*₂ trading program (See Section K)

401 KAR 52:060, *Acid rain permits* (See Section J)

401 KAR 60:005, Section 2(2)(ffff), 40 C.F.R. 60.4300 to 60.4420, Table 1 (**Subpart KKKK**), Standards of Performance for Stationary Combustion Turbines

STATE-ORIGIN REQUIREMENTS:

401 KAR 63:020, Potentially hazardous matter or toxic substances

NON-APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(dddd), 40 C.F.R. 63.6080 to 63.6175, Tables 1 to 7 (**Subpart YYYY**), National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. **Operating Limitations:**

a. The permittee shall limit the operation of Emission Units 01 and 02 to 10,360 hours per year on a 12-month rolling total basis [To preclude 401 KAR 51:017].

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4.** Specific Monitoring Requirements (j) and **5.** Specific Recordkeeping Requirements (b).

b. The permittee shall operate and maintain the stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction [40 CFR 60.4333(a)].

2. Emission Limitations:

- a. Nitrogen oxides (NO_X) emissions shall not exceed the following:
 - i. The permittee shall meet the emission limits for NOx specified in Table 1 to 40 CFR 60, Subpart KKKK: [40 CFR 60.4320(a)]
 - 1. 25 ppm by volume at 15% O₂ or 150 nanograms per Joule (ng/J) of useful output (1.2 pounds per megawatt-hour (lb/MWh)) from each turbine; or [40 CFR 60, Subpart KKKK, Table 1]
 - 2. 96 ppm by volume at 15% oxygen or 590 ng/J of useful output (4.7 lb/MWh) from each turbine when operating at less than 75 percent of peak load or at temperatures less than 0 °F [40 CFR 60, Subpart KKKK, Table 1].

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4.** <u>Specific Monitoring Requirements</u> (a) through (f), **5.** <u>Specific Recordkeeping Requirements</u> (a), and **6.** <u>Specific Reporting Requirements</u> (a) through (c).

ii. 225 tons per year for all turbines combined on a 12-month rolling total basis [To preclude 401 KAR 51:017].

Compliance Demonstration Method:

Compliance shall be demonstrated by determining NO_X emissions using the NO_X CEMS and 5. Specific Recordkeeping Requirements (d).

- b. The permittee shall comply with either 40 CFR 60.4330(a)(1) or (a)(2) [40 CFR 60.4330(a)]:
 - i. The permittee shall not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO_2 in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output; or [40 CFR 60.4330(a)(1)]

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

ii. The permittee shall not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input [40 CFR 60.4330(a)(2)].

Compliance Demonstration Method:

Compliance shall be demonstrated according to 3. <u>Testing Requirements</u> (b), 4. <u>Specific Monitoring Requirements</u> (g) through (i), 6. <u>Specific Reporting Requirements</u> (b) and (d).

c. Carbon monoxide (CO) emissions shall not exceed 225 tons per year for all turbines combined on a 12-month rolling total basis. [To preclude 401 KAR 51:017]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4.** Specific Monitoring Requirements (k) and **5.** Specific Recordkeeping Requirements (e).

d. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants [401 KAR 63:020, Section 3].

Compliance Demonstration Method:

Based upon the emission rates of toxics and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.

3. Testing Requirements:

- a. The permittee shall conduct an initial NOx performance test, as required in 40 CFR 60.8. Subsequent NO_X performance tests shall be conducted on an annual basis (no more than fourteen (14) calendar months following the previous performance test) [40 CFR 60.4400(a)]. Performance tests shall be conducted as specified in 40 CFR 60.4400(a)(1) or 40 CFR 60.4405.
- b. The permittee shall conduct an initial SO₂ performance test, as required in 40 CFR 60.8. Subsequent SO₂ performance tests shall be conducted on an annual basis (no more than fourteen (14) calendar months following the previous performance test). There are four methodologies that the permittee may use to conduct the performance tests, as follows: [40 CFR 60.4415(a)]
 - i. The use of a current, valid purchase contract, tariff sheet, or transportation contract for the fuel specifying the maximum total sulfur content of all fuels combusted in the affected facility. Alternately, the fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR Part 75 may be used [40 CFR 60.4415(a)(1)].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. Periodically determine the sulfur content of the fuel combusted in the turbine. A representative fuel sample would be collected following ASTM D5287 (incorporated by reference, see 40 CFR 60.17) for natural gas. The fuel analyses of this section may be performed either by the permittee, a service contractor retained by the permittee, the fuel vendor, or any other qualified agency. Analyze the samples for the total sulfur content of the fuel using ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see 40 CFR 60.17) [40 CFR 60.4415(a)(2)].
- iii. Measure the SO₂ concentration (in parts per million (ppm)), using U.S. EPA Reference Methods 6, 6C, 8, or 20 in Appendix A of 40 CFR Part 60. In addition, the American Society of Mechanical Engineers (ASME) standard, ASME PTC 19–10–1981–Part 10, "Flue and Exhaust Gas Analyses," manual methods for sulfur dioxide (incorporated by reference, see 40 CFR 60.17) can be used instead of U.S. EPA Reference Methods 6 or 20. For units complying with the output based standard, concurrently measure the stack gas flow rate, using U.S. EPA Reference Methods 1 and 2 in 40 CFR 60, Appendix A, and measure and record the electrical and thermal output from the unit. Then use the following equation to calculate the SO₂ emission rate [40 CFR 60.4415(a)(3)]:

$$E = \frac{1.664 \times 10^{-7} * (SO_2)_e * Q_{ad}}{P}$$
 (Eq. 6)

Where:

 $\begin{array}{lll} E & = & SO_2 \ emission \ rate, \ in \ lb/MWh \\ 1.664\times10^{-7} & = & conversion \ constant, \ in \ lb/dscf-ppm \\ (SO_2)_c & = & average \ SO_2 \ concentration \ for \ the \ run, \ in \ ppm \\ Q_{std} & = & stack \ gas \ volumetric \ flow \ rate, \ in \ dscf/hr \\ P & = & gross \ electrical \ output, \ in \ MW, \ or \end{array}$

iv. Measure the SO₂ and diluent gas concentrations, using either U.S. EPA Reference Methods 6, 6C, or 8 and 3A, or 20 in Appendix A of 40 CFR Part 60. In addition, the permittee may use the manual methods for sulfur dioxide ASME PTC 19–10–1981– Part 10 (incorporated by reference, see 40 CFR 60.17). Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use U.S EPA Reference Method 19 in Appendix A of 40 CFR Part 60 to calculate the SO₂ emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in 40 CFR 60.4350(f) to calculate the SO₂ emission rate in lb/MWh [40 CFR 60.4415(a)(4)].

4. Specific Monitoring Requirements:

- a. The permittee shall use continuous emission monitoring, as follows [40 CFR 60.4335(b)]:
 - i. Install certify, maintain, and operate a continuous emission monitoring system (CEMS) consisting of a NO_X monitor and a diluent gas (oxygen (O₂) or carbon dioxide (CO₂)) monitor, to determine the hourly NO_X emission rate in parts per

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

million (ppm) or pounds per million British thermal units (lb/MMBtu); and [40 CFR 60.4335(b)(1)]

- ii. For units complying with the output-based standard, install, calibrate, maintain, and operate a fuel flow meter (or flow meters) to continuously measure the heat input to the affected unit; and [40 CFR 60.4335(b)(2)]
- iii. For units complying with the output-based standard, install, calibrate, maintain, and operate a watt meter (or meters) to continuously measure the gross electrical output of the unit in megawatt-hours [40 CFR 60.4335(b)(3)].
- b. Each NO_X diluent CEMS shall be installed and certified according to Performance Specification 2 (PS 2) in Appendix B to 40 CFR Part 60, except the 7-day calibration drift is based on unit operating days, not calendar days. With state approval, Procedure 1 in Appendix F to 40 CFR Part 60 is not required. Alternatively, a NO_X diluent CEMS that is installed and certified according to Appendix A of 40 CFR Part 75 is acceptable for use under 40 CFR 60, Subpart KKKK. The relative accuracy test audit (RATA) of the CEMS shall be performed on a lb/MMBtu basis [40 CFR 60.4345(a)].
- c. As specified in 40 CFR 60.13(e)(2), during each full unit operating hour, both the NO_X monitor and the diluent monitor shall complete a minimum of once cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required for each monitor to validate the NO_X emission rate for the hour [40 CFR 60.4345(b)].
- d. Each fuel flowmeter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, with state approval, fuel flowmeters that meet the installation, certification, and quality assurance requirements of Appendix D to 40 CFR Part 75 are acceptable for use under 40 CFR 60, Subpart KKKK [40 CFR 60.4345(c)].
- e. Each watt meter, steam flow meter, and each pressure or temperature measurement device shall be installed, calibrated, maintained, and operated according to manufacturer's instructions [40 CFR 60.4345(d)].
- f. The permittee shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment described in 40 CFR 60.4345(a), (c), and (d). For the CEMS and fuel flow meters, the permittee may, with state approval, satisfy the requirements of 40 CFR 60.4345(e) by implementing the QA program and plan described in Section 1 of Appendix B to 40 CFR Part 75 [40 CFR 60.4345(e)].
- g. The permittee shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in 40 CFR 60.4365. The sulfur content of the fuel shall be determined using total sulfur methods described in 40 CFR 60.4415. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the

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applicable limit, ASTM D4084, D4810, D5504, or D6228, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see 40 CFR 60.17), which measure the major sulfur compounds, may be used [40 CFR 60.4360].

- h. The permittee may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input. The permittee shall use one of the following sources of information to make the required demonstration: [40 CFR 60.4365]
 - i. The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for natural gas is 20 grains of sulfur or less per 100 standard cubic feet and has potential sulfur emissions of less than 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input; or [40 CFR 60.4365(a)]
 - ii. Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input. 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 60.4365(b)].
- i. The frequency of determining the sulfur content of the fuel shall be as follows [40 CFR 60.4370]:
 - i. Gaseous fuel. If the permittee elects not to demonstrate sulfur content using options in 40 CFR 60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of gaseous fuel shall be determined and recorded once per unit operating day [40 CFR 60.4370(b)].
 - ii. Custom schedules. Notwithstanding the requirements of 40 CFR 60.4370(b), operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in 40 CFR 60.4370(c)(1) and (c)(2), custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in 40 CFR 60.4330 [40 CFR 60.4370(c)]
 - 1. The two custom sulfur monitoring schedules set forth in 40 CFR 60.4370(c)(1)(i) through (iv) and in 40 CFR 60.4370(c)(2) are acceptable, without prior Administrator approval [40 CFR 60.4370(c)(1)]:
 - A. The permittee shall obtain daily total sulfur content measurements for 30 consecutive unit operating days, using the applicable methods specified in 40 CFR 60, Subpart KKKK. 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 40 CFR 60.4370(c)(1)(ii), (iii), or (iv), as applicable [40 CFR 60.4370(c)(1)(i)].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- B. If none of the 30 daily measurements of the fuel's total sulfur content exceeds half the applicable standard, 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 greater than half but less than the applicable limit, follow the procedures in 40 CFR 60.4370(c)(1)(iii). If any measurement exceeds the applicable limit, follow the procedures in 40 CFR 60.4370(c)(1)(iv) [40 CFR 60.4370(c)(1)(ii)].
- C. If at least one of the 30 daily measurements of the fuel's total sulfur content is greater than half but less than the applicable limit, but none exceeds the applicable limit, then [40 CFR 60.4370(c)(1)(iii)]:
 - I. Collect and analyze a sample every 30 days for 3 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in 40 CFR 60.4370(c)(1)(iv). Otherwise, follow the procedures in 40 CFR 60.4370(c)(1)(iii)(B) [40 CFR 60.4370(c)(1)(iii)(A)].
 - II. Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in 40 CFR 60.4370(c)(1)(iv). Otherwise, follow the procedures in 40 CFR 60.4370(c)(1)(iii)(C) [40 CFR 60.4370(c)(1)(iii)(B)].
 - III. Begin monitoring at 12-month intervals for 12 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in 40 CFR 60.4370(c)(1)(iv). Otherwise, continue to monitor at this frequency [40 CFR 60.4370(c)(1)(iiii)(C)].
- D. If a sulfur content measurement exceeds the applicable limit, immediately begin daily monitoring according to 40 CFR 60.4370(c)(1)(i) of this section. Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur content no greater than the applicable limit, are obtained. At that point, the applicable procedures in 40 CFR 60.4370(c)(1)(ii) or (iii) shall be followed [40 CFR 60.4370(c)(1)(iv)].
- 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 60.4370(c)(2)]:
 - A. If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 scf, no additional monitoring of the sulfur content of the gas is required, for the purposes of 40 CFR 60, Subpart KKKK [40 CFR 60.4370(c)(2)(i)].
 - 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 half the applicable limit,

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then the minimum required sampling frequency shall be one sample at 12 month intervals [40 CFR 60.4370(c)(2)(ii)].

- C. If any sample result exceeds half the applicable limit, but none exceeds the applicable limit, follow the provisions of 40 CFR 60.4370(c)(1)(iii) [40 CFR 60.4370(c)(2)(iii)].
- D. If the sulfur content of any of the 720 hourly samples exceeds the applicable limit, follow the provisions of 40 CFR 60.4370(c)(1)(iv) [40 CFR 60.4370(c)(2)(iv)].
- j. The permittee shall monitor hours of operation of each turbine on a monthly basis [401 KAR 52:020, Section 10].
- k. The permittee shall monitor the amount of natural gas combusted (MMscf) in each turbine on a monthly basis [401 KAR 52:020, Section 10].
- 1. Records of each compliance test and all other records and reports required by this permit shall be maintained for 5 years [401 KAR 52:020, Section 10].
- m. See Section F Monitoring, Recordkeeping, and Reporting Requirements.

5. Specific Recordkeeping Requirements:

- a. For the purposes of identifying excess emissions [40 CFR 60.4350]:
 - i. All CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h) [40 CFR 60.4350(a)].
 - ii. For each unit operating hour in which a valid hourly average, as described in 40 CFR 60.4345(b), is obtained for both NO_X and diluent monitors, the data acquisition and handling system shall calculate and record the hourly NO_X emission rate in units of ppm or lb/MMBtu, using the appropriate equation from U.S. EPA Reference Method 19 in in Appendix A of 40 CFR Part 60. For any hour in which the hourly average O₂ concentration exceeds 19.0 percent O₂ (or the hourly average CO₂ concentration is less than 1.0 percent CO₂), a diluent cap value of 19.0 percent O₂ or 1.0 percent CO₂ (as applicable) may be used in the emission calculations [40 CFR 60.4350(b)].
 - iii. Correction of measured NO_X concentrations to 15 percent O₂ is not allowed [40 CFR 60.4350(c)].
 - iv. If a NO_X diluent CEMS to meet the requirements of 40 CFR Part 75 has been installed and certified, states can approve that only quality assured data from the CEMS shall be used to identify excess emission under 40 CFR 60, Subpart KKKK. Periods where the missing data substitution procedures in 40 CFR 75, Subpart D are applied are to be reported as monitor downtime in the excess emission and monitoring performance report required under 40 CFR 60.7(c) [40 CFR 60.4350(d)].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- v. All required fuel flow rate, steam flow rate, temperature, pressure, and megawatt data shall be reduced to hourly averages [40 CFR 60.4350(e)].
- vi. Calculate the hourly average NO_X emission rates, in units of the emission standards under 40 CFR 60.4320, using either ppm for units complying with the concentration limit or the following equation for units complying with the output based standard: [40 CFR 60.4350(f) and 40 CFR 60.4350(f)(1)]

$$E = \frac{(NO_x)_b * (HI)_b}{P} \qquad (Eq. 1)$$

Where:

E = hourly NO_X emission rate, in lb/MWh, $(NO_X)_h$ = hourly NO_X emission rate, in lb/MMBtu,

 $(HI)_h$ = hourly heat input rate to the unit, in MMBtu/h, measured using

the fuel flowmeter(s), e.g., calculated using Equation D-15a in

Appendix D to 40 CFR Part 75, and

P = gross energy output of the combustion turbine in MW.

- vii. The permittee shall use the calculated hourly average emission rates from 40 CFR 60.4350(f) to assess excess emissions on a 4-hour rolling average basis, as described in 40 CFR 60.4380(b)(1) [40 CFR 60.4350(g)].
- b. The permittee shall maintain records of the hours of operation of each turbine on a monthly basis and hours of operation for all turbines combined on a 12-month rolling total basis [401 KAR 52:020, Section 10].
- c. The permittee shall monitor the amount of natural gas combusted (MMscf) in each turbine on a monthly basis [401 KAR 52:020, Section 10].
- d. The permittee shall maintain records of monthly and 12-month rolling total emissions of NOx for all turbines [401 KAR 52:020, Section 10].
- e. The permittee shall maintain records of monthly and 12-month rolling total emissions of CO for all turbines. CO emissions shall be calculated using monthly fuel consumption data and an emission factor of 136 lb CO/MMscf natural gas. When actual data is available, such as from CEMS or performance testing, it shall be used in the calculation instead [401 KAR 52:020, Section 10].
- f. See Section F Monitoring, Recordkeeping, and Reporting Requirements.

6. Specific Reporting Requirements:

a. For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under 40 CFR 60, Subpart KKKK, the permittee shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c). Excess emissions shall be reported for all periods of unit operation, including start-up, shutdown, and malfunction [40 CFR 60.4375(a)].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. For each affected unit that performs annual performance tests in accordance with 40 CFR 60.4340(a), the permittee shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test [40 CFR 60.4375(b)].
- c. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows [40 CFR 60.4380 and 60.4380(b)]:
 - i. Any excess emissions is any unit operating period in which the 4-hour rolling average NO_X emission rate exceeds the applicable emission limit in 40 CFR 60.4320. For the purposes of 40 CFR 60, Subpart KKKK, a "4-hour rolling average NO_X emission rate" is the arithmetic average of the average NO_X emission rate in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given hour and the three unit operating hour average NO_X emission rates immediately preceding that unit operating hour. Calculate the rolling average if a valid NO_X emission rate is obtained for at least 3 of the 4 hours [40 CFR 60.4380(b)(1)].
 - ii. A period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NO_X concentration, CO₂ or O₂ concentration, fuel flow rate, steam flow rate, steam temperature, steam pressure, or megawatts. The steam flow rate, steam temperature, and steam pressure are only required if the permittee will use this information for compliance purposes [40 CFR 60.4380(b)(2)].
 - iii. For operating periods during which multiple emissions standards apply, the applicable standard is the average of the applicable standards during each hour. For hours with multiple emissions standards, the applicable limit for that hour is determined based on the condition that corresponded to the highest emissions standard [40 CFR 60.4380(b)(3)].
- d. If the permittee chooses the option to monitor the sulfur content of the fuel, excess emissions and monitoring downtime are defined as follows [40 CFR 60.4385]:
 - i. For samples of gaseous fuel 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 combustion turbine exceeds the applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit [40 CFR 60.4385(a)].
 - 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 of a required sample, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample [40 CFR 60.4385(c)].
- e. All reports required under 40 CFR 60.7(c) shall be postmarked by the 30th day following the end of each 6-month period [40 CFR 60.4395].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

f. The permittee shall include 12-month rolling total NO_X emissions and 12-month rolling total CO emissions in the semi-annual report [401 KAR 52:020, Section 10].

7. Specific Control Equipment Operating Conditions:

- a. The low NO_X burners and water injection system shall be operated while burning natural gas to maintain compliance with permitted emission limitations, consistent with manufacturer's specifications and standard operating practices [401 KAR 50:055].
- b. See Section E Source Control Equipment Requirements.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 03

Emergency Generator Engine

Description:

Cummins Power Generation QST30-G5 NR2 Rated at 1,490 HP (3.79 MMBtu/hr) Diesel fueled, 30.4 L total displacement (2.54 L/cyl)

Construction Date: March 2010

APPLICABLE REGULATIONS:

401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 to 60.4219, Tables 1 to 8 (Subpart IIII), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

1. **Operating Limitations**:

- a. The permittee shall meet the requirements of 40 CFR Part 63 by meeting the requirements of 40 CFR 60, Subpart IIII. No further requirements apply for the engine under 40 CFR Part 63 [40 CFR 63.6590(a)(2)(iii) and 63.6590(c)].
- b. The permittee shall operate and maintain the stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine [40 CFR 60.4206].

Compliance Demonstration Method:

Compliance shall be demonstrated according to $\bf 5$. Specific Recordkeeping Requirements (c).

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

Compliance Demonstration Method:

Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements** (b).

- d. The permittee shall do all of the following, except as permitted under 40 CFR 60.4211(g) [40 CFR 60.4211(a)]:
 - i. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [40 CFR 60.4211(a)(1)]
 - ii. Change only those emission-related settings that are permitted by the manufacturer; and [40 CFR 60.4211(a)(2)]

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii. Meet the requirements of 40 CFR Parts 89, 94, and/or 1068, as they apply to the permittee. [40 CFR 60.4211(a)(3)]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements** (c).

- e. The permittee shall operate the emergency stationary ICE according to the requirements in 40 CFR 60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.4211(f)(1) through (3), is prohibited. If the engine is not operated according to the requirements in 40 CFR 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under 40 CFR 60, Subpart IIII and shall meet all requirements for non-emergency engines [40 CFR 60.4211(f)].
 - i. There is no time limit on the use of emergency stationary ICE in emergency situations [40 CFR 60.4211(f)(1)].
 - ii. The permittee may operate the emergency stationary ICE for the purpose specified in 40 CFR 60.4211(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year as allowed by this paragraph [40 CFR 60.4211(f)(2)].
 - 1. The permittee may operate the emergency stationary ICE for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year [40 CFR 60.4211(f)(2)(i)].
 - iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity [40 CFR 60.4211(f)(3)].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- 1. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met [40 CFR 60.4211(f)(3)(i)]:
 - A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator; [40 CFR 60.4211(f)(3)(i)(A)]
 - B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region [40 CFR 60.4211(f)(3)(i)(B)].
 - C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines [40 CFR 60.4211(f)(3)(i)(C)].
 - D. The power is provided only to the facility itself or to support the local transmission and distribution system [40 CFR 60.4211(f)(3)(i)(D)].
 - E. The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee [40 CFR 60.4211(f)(3)(i)(E)].

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4.** <u>Specific Monitoring Requirements</u> (a) and **5.** <u>Specific Recordkeeping Requirements</u> (a).

2. Emission Limitations:

The permittee shall comply with the emission standards for new nonroad engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power. [40 CFR 60.4205(b)]

Compliance Demonstration Method:

The permittee shall demonstrate compliance by either:

- 1. Purchasing an engine certified to the emission standards in 40 CFR 60.4205(b) for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g); or [40 CFR 60.4211(c)]
- 2. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall keep a maintenance plan and records of conducted

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. The permittee shall conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards [40 CFR 60.4211(g) and 60.4211(g)(3)].

3. <u>Testing Requirements</u>:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 50:045, Section 4.

4. **Specific Monitoring Requirements:**

- a. The permittee shall monitor the hours of operation of the engine in emergency and non-emergency service and the reason the engine was in operation during that time [40 CFR 60.4214(b) and 401 KAR 52:020, Section 10].
- b. See Section F Monitoring, Recordkeeping, and Reporting Requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]
- b. The permittee shall maintain records of fuel purchases to show that the fuel meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain records of maintenance conducted on the engine consistent with the operating requirements of 40 CFR 60.4206 and 40 CFR 60.4211(a). [401 KAR 52:020, Section 10]
- d. See Section F Monitoring, Recordkeeping, and Reporting Requirements.

6. Specific Reporting Requirements:

See Section F – Monitoring, Recordkeeping, and Reporting Requirements.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 04

Diesel Fire Pump

Description:

John Deere 4045DF120 diesel fire pump Rated at 55 HP (0.385 MMBtu/hr) Construction Date: March 2010

APPLICABLE REGULATIONS:

401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 to 60.4219, Tables 1 to 8 (Subpart IIII), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

1. **Operating Limitations:**

- a. The permittee shall meet the requirements of 40 CFR Part 63 by meeting the requirements of 40 CFR 60, Subpart IIII. No further requirements apply for the engine under 40 CFR Part 63 [40 CFR 63.6590(c) and 63.6590(c)(6)].
- b. The permittee shall operate and maintain the stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine [40 CFR 60.4206].

Compliance Demonstration Method:

Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements** (c).

c. The permittee shall use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010 may be used until depleted [40 CFR 60.4207(b)].

Compliance Demonstration Method:

Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements** (b).

- d. The permittee shall do all of the following, except as permitted under 40 CFR 60.4211(g): [40 CFR 60.4211(a)]
 - i. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [40 CFR 60.4211(a)(1)]
 - ii. Change only those emission-related settings that are permitted by the manufacturer; and [40 CFR 60.4211(a)(2)]

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii. Meet the requirements of 40 CFR Parts 89, 94, and/or 1068, as they apply to the permittee [40 CFR 60.4211(a)(3)].

Compliance Demonstration Method:

Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements** (c).

- e. The permittee shall operate the emergency stationary ICE according to the requirements in 40 CFR 60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.4211(f)(1) through (3), is prohibited. If the engine is not operated according to the requirements in 40 CFR 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under 40 CFR 60, Subpart IIII and shall meet all requirements for non-emergency engines [40 CFR 60.4211(f)].
 - i. There is no time limit on the use of emergency stationary ICE in emergency situations [40 CFR 60.4211(f)(1)].
 - ii. The permittee may operate the emergency stationary ICE for the purpose specified in 40 CFR 60.4211(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year as allowed by this paragraph [40 CFR 60.4211(f)(2)].
 - 1. The permittee may operate the emergency stationary ICE for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year [40 CFR 60.4211(f)(2)(i)].
 - iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity [40 CFR 60.4211(f)(3)].

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- 1. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met [40 CFR 60.4211(f)(3)(i)]:
 - A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator; [40 CFR 60.4211(f)(3)(i)(A)]
 - B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region [40 CFR 60.4211(f)(3)(i)(B)].
 - C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines [40 CFR 60.4211(f)(3)(i)(C)].
 - D. The power is provided only to the facility itself or to support the local transmission and distribution system [40 CFR 60.4211(f)(3)(i)(D)].
 - E. The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee [40 CFR 60.4211(f)(3)(i)(E)].

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4.** Specific Monitoring Requirements (a) and **5.** Specific Recordkeeping Requirements (a).

2. Emission Limitations:

The permittee shall comply with the emission standards in Table 4 of 40 CFR 60, Subpart IIII, for all pollutants [40 CFR 60.4205(c)]:

Maximum Engine Power	Model Year(s)	$NMHC + NO_X$	CO	PM
		g/kw-hr	g/kw-hr	g/kw-hr
		(g/hp-hr)	(g/hp-hr)	(g/hp-hr)
37≤KW<56	2010 and	10.5	5.0	0.80
(50\le HP\le 75)	earlier	(7.8)	(3.7)	(0.60)

Compliance Demonstration Method:

The permittee shall demonstrate compliance by either:

1. Purchasing an engine certified to the emission standards in 40 CFR 60.4205(c) for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine shall be installed and configured according to the manufacturer's

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

emission-related specifications, except as permitted in 40 CFR 60.4211(g); or [40 CFR 60.4211(c)]

2. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if the engine and control device is not installed and configured according to the manufacturer's emission-related instruction, or the emission-related settings are changed in a way that is not permitted by the manufacturer, the permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action [40 CFR 60.4211(g) and 60.4211(g)(1)].

3. Testing Requirements:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 50:045, Section 4.

4. **Specific Monitoring Requirements:**

- a. The permittee shall monitor the hours of operation of the engine in emergency and non-emergency service and the reason the engine was in operation during that time [40 CFR 60.4214(b) and 401 KAR 52:020, Section 10].
- b. See Section F Monitoring, Recordkeeping, and Reporting Requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time [40 CFR 60.4214(b)].
- b. The permittee shall maintain records of fuel purchases to show that the fuel meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel [401 KAR 52:020, Section 10].
- c. The permittee shall maintain records of maintenance conducted on the engine consistent with the operating requirements of 40 CFR 60.4206 and 40 CFR 60.4211(a) [401 KAR 52:020, Section 10].
- d. See Section F Monitoring, Recordkeeping, and Reporting Requirements.

6. Specific Reporting Requirements:

See Section F – Monitoring, Recordkeeping, and Reporting Requirements.

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SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

Description

Generally Applicable Regulation

1. Inlet Combustion Air Cooler

N/A

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SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. SO₂, NO_x, CO, and PM emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

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SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

- 1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five (5) years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. In accordance with the requirements of 401 KAR 52:020, Section 3(1)h, the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit:
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- 6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020, Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
- 7. In accordance with the provisions of 401 KAR 50:055, Section 1, the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
- 8. The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken shall be submitted to the Regional Office listed on the front of this permit. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement does not identify a specific time frame for reporting deviations, prompt reporting, as required by Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, shall be defined as follows:
 - a. For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
 - b. For emissions of any regulated air pollutant, excluding those listed in F.8.a., that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
 - c. All deviations from permit requirements, including those previously reported, shall be included in the semiannual report required by F.6.
- 9. Pursuant to 401 KAR 52:020, Title V permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- d. The method used for determining the compliance status for the source, currently and over the reporting period.
- e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
- f. The certification shall be submitted by January 30th of each year. Annual compliance certifications shall be sent to the following addresses:

Division for Air Quality Paducah Regional Office 130 Eagle Nest Drive Paducah, KY 42003 U.S. EPA Region 4 Air Enforcement Branch Atlanta Federal Center 61 Forsyth St. SW Atlanta, GA 30303-8960

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within 30 days of the date the Kentucky Emissions Inventory System (KYEIS) emissions survey is mailed to the permittee.

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SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020, Section 3(1)(b), and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - (2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
 - (4) New requirements become applicable to a source subject to the Acid Rain Program.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020, Section 3(1)(c)].

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SECTION G - GENERAL PROVISIONS (CONTINUED)

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements. [Section 1a-15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3) b.].
- 1. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3) d.].
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3) a.].

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SECTION G - GENERAL PROVISIONS (CONTINUED)

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

- q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
 - (1) Applicable requirements that are included and specifically identified in this permit; and
 - (2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six (6) months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020, Section 8(2)].

3. Permit Revisions

- a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan (SIP) or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

No construction authorized by this permit (V-23-038).

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SECTION G - GENERAL PROVISIONS (CONTINUED)

5. <u>Testing Requirements</u>

a. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.

- b. Pursuant to 401 KAR 50:045, Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NOx compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

7. Emergency Provisions

- a. Pursuant to 401 KAR 52:020, Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - (1) An emergency occurred and the permittee can identify the cause of the emergency;
 - (2) The permitted facility was at the time being properly operated;

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SECTION G - GENERAL PROVISIONS (CONTINUED)

(3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and

- (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.1-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- (5) This requirement does not relieve the source of other local, state or federal notification requirements.
- b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

8. Ozone Depleting Substances

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.155.
 - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156 and 40 CFR 82.157.
 - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

9. Risk Management Provisions

a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to U.S. EPA using the RMP* eSubmit software.

b. If requested, submit additional relevant information to the Division or the U.S. EPA.

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SECTION H - ALTERNATE OPERATING SCENARIOS

N/A

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SECTION I - COMPLIANCE SCHEDULE

N/A

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SECTION J – ACID RAIN

1. Statutory and Regulatory Authority

In accordance with KRS 224.10-100 and Titles IV and V of the Clean Air Act, the Kentucky Environmental and Public Protection Cabinet, Division for Air Quality issues this permit pursuant to 401 KAR 52:020, Title V Permits, 401 KAR 52:060, Acid Rain Permits, and 40 CFR Part 76.

2. Permit Requirements:

This Acid Rain Permit covers Acid Rain Paducah Plant 1 (Emission Units 01-02). They are gas fired peaking electric generating units. The Acid Rain Permit Application and NO_x Compliance Plan received on August 03, 2007 are hereby incorporated into and made part of this permit and the permittee must comply with the standard requirements and special provisions set forth in the application [40 CFR 72.9(a)(2)].

3. Acid Rain Program Emission and Operating Limitations:

The applicable Acid Rain emission limitations for the permittee are set in 40 CFR 73.10, Table 2, 40 CFR 76.5, and 40 CFR 76.11 and they are tabulated in the table below:

Affected Unit: EU 01 and 02							
Year for SO ₂ Allowances	2024	2025	2026	2027	2028		
40 CFR Part 73.10	0*	0*	0*	0*	0*		

NO_x Limits and Requirements

NΔ*

There are no SO_2 allowance allocations per USEPA Acid Rain Program. These units currently do not have applicable NO_x limits set by 40 CFR Part 76

4. Compliance Plan:

The permittee shall operate in compliance with the requirements contained in the Acid Rain application and incorporated into this permit [40 CFR 72].

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SECTION K – CLEAN AIR INTERSTATE RULE (CAIR)

CSAPR implementation is now in place and replaces requirements under EPA's 2005 Clean Air Interstate Rule

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SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR)

Description of CSAPR Monitoring Provisions

The CSAPR subject units, and the unit-specific monitoring provisions at this source, are identified in the following tables. These units are subject to the requirements for the CSAPR NO_x Annual Trading Program, CSAPR NO_x Ozone Season Group 2 Trading Program, and CSAPR SO_2 Group 1 Trading Program

Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO ₂ monitoring) and 40 CFR part 75, subpart H (for NO _X monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted 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 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E			
Unit ID: Emission Units 1 & 2 (Units 1 & 2)								
SO_2			X					
NO_X	X							
Heat input	X							

- 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 401 KAR 51:240, Section 3(25) through 401 KAR 51:250, Section 3(30) (CSAPR NOx Annual Trading Program), 401 KAR 51:250 Section 3(25) through 401 KAR 51:250, Section 3(30) (CSAPR NOx Ozone Season Group 2 Trading Program), and 401 KAR 51:260 Section 3(25) through 401 KAR 51:260, Section 3(30) (CSAPR SO2 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. Owners and operators must submit to the Administrator 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: http://www.epa.gov/airmarkets/emissions/monitoringplans.html.
- 3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR 75, Subpart E and 40 CFR 75.66 and 401 KAR 51:240, Section

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SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

3(30) (CSAPR NO_x Annual Trading Program), 401 KAR 51:250, Section 3(30) (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 401 KAR 51:260, Section 3(30) (CSAPR SO₂ Group 1 Trading Program). The Administrator'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/emisisons/petitions.html.

- 4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirements under 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(29) (CSAPR NO_x Annual Trading Program), 401 KAR 51:250, Section 3(25) through 401 KAR 51:250, Section 3(29) (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 401 KAR 51:260, Section 3(25) through 401 KAR 51:260, Section 3(29) (CSAPR SO₂ Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 401 KAR 51:240, Section 3(30) (CSAPR NO_x Annual Trading Program), 401 KAR 51:250, Section 3(30) (CSAPR SO₂ Group 1 Trading Program), and 401 KAR 51:260, Section 3(30) (CSAPR NO_x Ozone Season Group 2 Trading Program). The Administrator'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 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(29) (CSAPR NO_x Annual Trading Program), 401 KAR 51:250, Section 3(25) through 401 KAR 51:250, Section 3(29) (CSAPR NO_x Ozone Season Group 2 Trading Program), and 401 KAR 51:260, Section 3(25) through 401 KAR 51:260, Section 3(29) (CSAPR SO₂ Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B), may be used to add or change this unit's monitoring system description.

CSAPR NO_x Annual Trading Program requirements (401 KAR 51:240, Section 3(4))

a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 401 KAR 51:240, Section 3(10) through 401 KAR 51:240, Section 3(15).

b) Emissions monitoring, reporting, and recordkeeping requirements.

1. The owners and operators, and the designated representative, of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 401 KAR 51:240, Section 3(25) (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 401 KAR 51:240, Section 3(26) (initial monitoring system certification and recertification procedures), 401 KAR 51:240, Section 3(27) (monitoring system out-of-control periods), 401 KAR 51:240, Section 3(28) (notifications concerning monitoring), 401 KAR 51:240, Section 3(29) (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 401 KAR 51:240, Section 3(30) (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

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SECTION L - CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

2. The emissions data determined in accordance with 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(30) shall be used to calculate allocations of CSAPR NO_x Annual allowances under 401 KAR 51:240, Section 3(8) (40 CFR 97.411(a)(2) and (b)) and 401 KAR 51:240, Section 3(9) and to determine compliance with the CSAPR NO_x Annual emissions limitation and assurance provisions under paragraph (c) below, 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 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(30) and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

c) NO_x emissions requirements.

- 1. CSAPR NO_x Annual emissions limitation.
 - i. As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall hold, in the source's compliance account, CSAPR NO_x Annual allowances available for deduction for such control period under 401 KAR 51:240, Section 3(20) (40 CFR 97.424(a)) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Annual units at the source.
 - ii. If total NO_x emissions during a control period in a given year from the CSAPR NO_x Annual units at a CSAPR NO_x Annual source are in excess of the CSAPR NO_x Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - A) The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall hold the CSAPR NO_x Annual allowances required for deduction under 401 KAR 51:240, Section 3(20) (40 CFR 97.424(d)); and
 - B) The owners and operators of the source and each CSAPR NO_x Annual unit at the source 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 401 KAR 51:240 and the Clean Air Act.

2. CSAPR NO_x Annual assurance provisions.

i. If total NO_x emissions during a control period in a given year from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state exceed the state assurance level, then the owners and operators 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_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Annual allowances available for deduction for such control period under 401 KAR 51:240, Section 3(21) (40 CFR 97.425(a)) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 401 KAR 51:240, Section 3(21) (40 CFR 97.425(b)), of multiplying— (A) The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all

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SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state for such control period exceed the state assurance level.

- ii. The owners and operators shall hold the CSAPR NO_x Annual allowances required under paragraph (c)(2)(i) above, 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 such control period.
- iii. Total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the State during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the state NO_x Annual trading budget under 401 KAR 51:240, Section 3(7)(a)(1) and the state's variability limit under 401 KAR 51:240, Section 3(7)(a)(3).
- iv. It shall not be a violation of 401 KAR 51:240, or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the State during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state during a control period exceeds the common designated representative's assurance level.
- v. To the extent the owners and operators fail to hold CSAPR NO_x Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - B) Each CSAPR NO_x Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 401 KAR 51:240, and the Clean Air Act.

3. Compliance periods.

- i. A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 401 KAR 51:240, Section 3(25) (40 CFR 97.430(b)) and for each control period thereafter.
- ii. A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 401 KAR 51:240, Section 3(25) (40 CFR 97.430(b)) and for each control period thereafter.
- 4. Vintage of allowances held for compliance.
 - i. A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year shall be a CSAPR NO_x Annual allowance that was allocated for such control period or a control period in a prior year.
 - ii. A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given

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SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

year shall be a CSAPR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

- 5. Allowance Management System requirements. Each CSAPR NO_x Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 401 KAR 51:240.
- 6. Limited authorization. A CSAPR NO_x Annual allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
 - i. Such authorization shall only be used in accordance with the CSAPR NO_x Annual Trading Program; and
 - ii. Notwithstanding any other provision of 40 CFR 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- 7. Property right. A CSAPR NO_x Annual allowance does not constitute a property right.

d) Title V permit revision requirements.

- 1) No Title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Annual allowances in accordance with 401 KAR 51:240.
- 2) This permit incorporates the CSAPR emissions monitoring, recordkeeping, and reporting requirements pursuant to 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(30), and the requirements for a continuous emission monitoring system (pursuant to 40 CFR 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR 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 401 KAR 51:240, Section 3(4) (40 CFR 97.406(d)(2)) and 70.7(e)(2)(i)(B).

e) Additional recordkeeping and reporting requirements.

- 1. Unless otherwise provided, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall maintain on site at the source each of the following documents (in hardcopy or electronic format) 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 Administrator.
 - i. The certificate of representation under 401 KAR 51:240, Section 3(13) for the designated representative for the source and each CSAPR NO_x 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 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 401 KAR 51:240, Section 3(13) changing the designated representative.
 - ii. All emissions monitoring information, in accordance with 401 KAR 51:240.

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SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

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_x Annual Trading Program.

2. The designated representative of a CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall make all submissions required under the CSAPR NO_x Annual Trading Program, except as provided in 401 KAR 51:240, Section 3(15). 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 70.

f) Liability.

- 1) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual source or the designated representative of a CSAPR NO_x Annual source shall also apply to the owners and operators of such source and of the CSAPR NO_x Annual units at the source.
- 2) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual unit or the designated representative of a CSAPR NO_x Annual unit shall also apply to the owners and operators of such unit.

g) Effect on other authorities.

No provision of the CSAPR NO_x Annual Trading Program or exemption under 401 KAR 51:240, Section 3(3) shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Annual source or CSAPR NO_x Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

<u>CSAPR NO_x Ozone Season Group 2 Group 2 Trading Program Requirements (401 KAR 51:250, Section 3(4))</u>

a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 401 KAR 51:250, Section 3(10) through 401 KAR 51:250, Section 3(15).

b) Emissions monitoring, reporting, and recordkeeping requirements.

- 1. The owners and operators, and the designated representative, of each CSAPR NO_x Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 401 KAR 51:250, Section 3(25) (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 401 KAR 51:250, Section 3(26) (initial monitoring system certification and recertification procedures), 401 KAR 51:250, Section 3(27) (monitoring system out-of-control periods), 401 KAR 51:250, Section 3(28) (notifications concerning monitoring), 401 KAR 51:250, Section 3(29) (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 401 KAR 51:250, Section 3(30) (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- 2. The emissions data determined in accordance with 401 KAR 51:250, Section 3(25) through 401 KAR 51:250, Section 3(30) shall be used to calculate allocations of CSAPR NO_x Ozone Season Group 2 allowances under 401 KAR 51:250, Section 3(8) (40 CFR

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SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

97.811(a)(2) and (b)) and 401 KAR 51:250, Section 3(9) (40 CFR 97.812) and to determine compliance with the CSAPR NO_x Ozone Season Group 2 emissions limitation and assurance provisions under paragraph (c) below, 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 401 KAR 51:250, Section 3(25) through 401 KAR 51:250, Section 3(30) and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

c) NO_x emissions requirements.

- 1. CSAPR NO_x Ozone Season Group 2 emissions limitation.
 - i. As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 401 KAR 51:250, Section 3(20) (40 CFR 97.824(a)) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Ozone Season Group 2 units at the source.
 - ii. If total NO_x emissions during a control period in a given year from the CSAPR NO_x Ozone Season Group 2 units at a CSAPR NO_x Ozone Season Group 2 source are in excess of the CSAPR NO_x Ozone Season Group 2 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - A) The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold the CSAPR NO_x Ozone Season Group 2 allowances required for deduction under 401 KAR 51:250, Section 3(20) (40 CFR 97.824(d)); and
 - B) The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source 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 401 KAR 51:250, and the Clean Air Act.
- 2. CSAPR NO_x Ozone Season Group 2 assurance provisions.
 - i. If total NO_x emissions during a control period in a given year from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state exceed the state assurance level, then the owners and operators 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_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 401 KAR 51:250, Section 3(21) (40 CFR 97.825(a)) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 401 KAR 51:250, Section 3(21) (40 CFR 97.825(b)), of multiplying—

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SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

- A) The quotient of the amount by which the common designated representative's share of such NO_x 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 state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and
- B) The amount by which total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state for such control period exceed the state assurance level.
- ii. The owners and operators shall hold the CSAPR NO_x Ozone Season Group 2 allowances required under paragraph (c)(2)(i) above, 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 such control period.
- iii. Total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the State NO_x Ozone Season Group 2 trading budget under 401 KAR 51:250, Section 3(7)(a)(1) (40 CFR 97.810(a)) and the state's variability limit under 401 KAR 51:250, Section 3(7)(a)(3) (40 CFR 97.810(b)).
- iv. It shall not be a violation of 401 KAR 51:250, or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state during a control period exceeds the common designated representative's assurance level.
- v. To the extent the owners and operators fail to hold CSAPR NO_x Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - B) Each CSAPR NO_x Ozone Season Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 401 KAR 51:250, and the Clean Air Act.

3. Compliance periods.

- i. A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 401 KAR 51:250, Section 3(25) (40 CFR 97.830(b)) and for each control period thereafter.
- ii. A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 401 KAR 51:250, Section 3(25) (40 CFR 97.830(b)) and for each control period thereafter.

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SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

- 4. Vintage of allowances held for compliance.
 - i. A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year shall be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.
 - ii. A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year shall be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- 5. Allowance Management System requirements. Each CSAPR NO_x 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 401 KAR 51:250.
- 6. Limited authorization. A CSAPR NO_x Ozone Season Group 2 allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
 - i. Such authorization shall only be used in accordance with the CSAPR NO_x Ozone Season Group 2 Trading Program; and
 - ii. Notwithstanding any other provision of 401 KAR 51:250, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- 7. Property right. A CSAPR NO_x Ozone Season Group 2 allowance does not constitute a property right.

d) Title V permit revision requirements.

- 1. No Title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Ozone Season Group 2 allowances in accordance with 401 KAR 51:250.
- 2. This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 401 KAR 51:250, Section 3(25) through 401 KAR 51:250, Section 3(30), and the requirements for a continuous emission monitoring system (pursuant to 40 CFR 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR 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 with401 KAR 51:250, Section 3(4) (40 CFR 97.806(d)(2)) and 70.7(e)(2)(i)(B).

e) Additional recordkeeping and reporting requirements.

- 1. Unless otherwise provided, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall maintain on site at the source each of the following documents (in hardcopy or electronic format) 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 Administrator.
 - i. The certificate of representation under 401 KAR 51:250, Section 3(13) for the designated representative for the source and each CSAPR NO_x Ozone Season Group

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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 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 401 KAR 51:250, Section 3(13) changing the designated representative.

- ii. All emissions monitoring information, in accordance with 401 KAR 51:250.
- 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_x Ozone Season Group 2 Trading Program.
- 2. The designated representative of a CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NO_x Ozone Season Group 2 Trading Program, except as provided in 401 KAR 51:250, Section 3(15). 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 70.

f) Liability.

- 1. Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 source or the designated representative of a CSAPR NO_x Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the CSAPR NO_x Ozone Season Group 2 units at the source.
- 2. Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 unit or the designated representative of a CSAPR NO_x Ozone Season Group 2 unit shall also apply to the owners and operators of such unit.

g) Effect on other authorities.

No provision of the CSAPR NO_x Ozone Season Group 2 Trading Program or exemption under 401 KAR 51:250, Section 3(3) shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Ozone Season Group 2 source or CSAPR NO_x Ozone Season Group 2 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

CSAPR SO₂ Group 1 Trading Program requirements (401 KAR 51:260, Section 3(4))

a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 401 KAR 51:260, Section 3(10) through 401 KAR 51:260, Section 3(15).

b) Emissions monitoring, reporting, and recordkeeping requirements.

1. The owners and operators, and the designated representative, of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 401 KAR 51:260, Section 3(25) (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 401 KAR 51:260, Section 3(26) (initial monitoring system certification and recertification procedures), 401 KAR 51:260, Section 3(27) (monitoring system out-of-control periods),

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401 KAR 51:260, Section 3(28) (notifications concerning monitoring), 401 KAR 51:260, Section 3(29) (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 401 KAR 51:260, Section 3(30) (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

2. The emissions data determined in accordance with 401 KAR 51:260, Section 3(25) through 401 KAR 51:260, Section 3(30) shall be used to calculate allocations of CSAPR SO₂ Group 1 allowances under 401 KAR 51:260, Section 3(8) (40 CFR 97.611(a)(2)) and (b)) and 401 KAR 51:260, Section 3(9) and to determine compliance with the CSAPR SO₂ Group 1 emissions limitation and assurance provisions under paragraph (c) below, 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 401 KAR 51:260, Section 3(25) through 401 KAR 51:260, Section 3(30) and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

c) SO₂ emissions requirements.

- 1. CSAPR SO₂ Group 1 emissions limitation.
 - i. As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall hold, in the source's compliance account, CSAPR SO₂ Group 1 allowances available for deduction for such control period under 401 KAR 51:260, Section 3(20) (40 CFR 97.624(a)) in an amount not less than the tons of total SO₂ emissions for such control period from all CSAPR SO₂ Group 1 units at the source.
 - ii. If total SO₂ emissions during a control period in a given year from the CSAPR SO₂ Group 1 units at a CSAPR SO₂ Group 1 source are in excess of the CSAPR SO₂ Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - A) The owners and operators of the source and each CSAPR SO₂ Group 1 unit at the source shall hold the CSAPR SO₂ Group 1 allowances required for deduction under 401 KAR 51:260, Section 3(20) (40 CFR 97.624(d)); and
 - B) The owners and operators of the source and each CSAPR SO₂ Group 1 unit at the source 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 401 KAR 51:260, and the Clean Air Act.

2. CSAPR SO₂ Group 1 assurance provisions.

i. If total SO₂ emissions during a control period in a given year from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state exceed the state assurance level, then the owners and operators 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 SO₂ emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR SO₂ Group 1 allowances available for deduction for such control period under 401 KAR 51:260, Section 3(21) (40 CFR 97.625(a)) in an amount equal to two times the product

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(rounded to the nearest whole number), as determined by the Administrator in accordance with 401 KAR 51:260, Section 3(21) (40 CFR 97.625(b)), of multiplying—

- A) The quotient of the amount by which the common designated representative's share of such SO₂ 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 state for such control period, by which each common designated representative's share of such SO₂ emissions exceeds the respective common designated representative's assurance level; and
- B) The amount by which total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state for such control period exceed the state assurance level.
- ii. The owners and operators shall hold the CSAPR SO₂ Group 1 allowances required under paragraph (c)(2)(i) above, 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 such control period.
- iii. Total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total SO₂ emissions exceed the sum, for such control period, of the state SO₂ Group 1 trading budget under 401 KAR 51:260, Section 3(7)(a)(1) and the state's variability limit under 401 KAR 51:260, Section 3(7)(a)(3).
- iv. It shall not be a violation of 401 KAR 51:260, or of the Clean Air Act if total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total SO₂ emissions from the CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state during a control period exceeds the common designated representative's assurance level.
- v. To the extent the owners and operators fail to hold CSAPR SO₂ Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - B) Each CSAPR SO₂ Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 401 KAR 51:260, and the Clean Air Act.

3. Compliance periods.

- i. A CSAPR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 401 KAR 51:260, Section 3(25) (40 CFR 97.630(b)) and for each control period thereafter.
- ii. A CSAPR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 401 KAR 51:260, Section 3(25) (40 CFR 97.630(b)) and for each control period thereafter.

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SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

- 4. Vintage of allowances held for compliance.
 - i. A CSAPR SO₂ Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year shall be a CSAPR SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year.
 - ii. A CSAPR SO₂ Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year shall be a CSAPR SO₂ Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- 5. Allowance Management System requirements. Each CSAPR SO₂ Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 401 KAR 51:260.
- 6. Limited authorization. CSAPR SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ during the control period in one year. Such authorization is limited in its use and duration as follows:
 - i. Such authorization shall only be used in accordance with the CSAPR SO₂ Group 1 Trading Program; and
 - ii. Notwithstanding any other provision of 401 KAR 51:260, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- 7. Property right. CSAPR SO₂ Group 1 allowance does not constitute a property right.

d) Title V permit revision requirements.

- 1. No Title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR SO₂ Group 1 allowances in accordance with 401 KAR 51:260.
- 2. This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 401 KAR 51:260, Section 3(25) through 401 KAR 51:260, Section 3(30), and the requirements for a continuous emission monitoring system (pursuant to 40 CFR 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR 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 401 KAR 51:260, Section 3(4) (40 CFR 97.606(d)(2)) and 70.7(e)(2)(i)(B).

e) Additional recordkeeping and reporting requirements.

- 1. Unless otherwise provided, the owners and operators of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall maintain on site at the source each of the following documents (in hardcopy or electronic format) 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 Administrator.
 - (i). The certificate of representation under 401 KAR 51:260, Section 3(13) for the designated representative for the source and each CSAPR SO₂ 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

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at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.

- (ii). All emissions monitoring information, in accordance with 401 KAR 51:260.
- (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 SO₂ Group 1 Trading Program.
- 2. The designated representative of a CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall make all submissions required under the CSAPR SO₂ Group 1 Trading Program, except as provided in 401 KAR 51:260, Section 3(15). 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 70.

f) Liability.

- 1. Any provision of the CSAPR SO₂ Group 1 Trading Program that applies to a CSAPR SO₂ Group 1 source or the designated representative of a CSAPR SO₂ Group 1 source shall also apply to the owners and operators of such source and of the CSAPR SO₂ Group 1 units at the source.
- 2. Any provision of the CSAPR SO₂ Group 1 Trading Program that applies to a CSAPR SO₂ Group 1 unit or the designated representative of a CSAPR SO₂ Group 1 unit shall also apply to the owners and operators of such unit.

g) Effect on other authorities.

No provision of the CSAPR SO₂ Group 1 Trading Program or exemption under 401 KAR 51:260, Section 3(3) shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR SO₂ Group 1 source or CSAPR SO₂ Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.