

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

Final

AIR QUALITY PERMIT
Issued under 401 KAR 52:020

Permittee Name: Louisville Gas & Electric Company
Mailing Address: P.O. Box 32010
Louisville, KY 40232

Source Name: Louisville Gas & Electric Company (Trimble
County Generating Station)
Mailing Address: 487 Corn Creek Road
Bedford, KY 40006

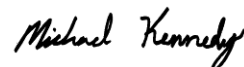
Source Location: 487 Corn Creek Road, Bedford, KY 40006

Permit: V-22-028
Agency Interest: 4054
Activity: APE20200001
Review Type: Title V, Operating
Source ID: 21-223-00002

Regional Office: Florence Regional Office
8020 Veterans Memorial Drive, Suite 110
Florence, KY 41042
(859) 525-4923

County: Trimble

Application
Complete Date: February 18, 2022
Issuance Date: January 20, 2023
Expiration Date: January 20, 2028



Michael J. Kennedy, P.E.
Director
Division for Air Quality

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| Permit | Permit Type | Activity# | Complete Date | Issuance Date | Summary of Action |
|----------|-------------|----------------------------|---------------|---------------|-------------------|
| V-22-028 | Renewal | APE20200001 APE20210008 | 2/18/2022 | 1/20/2023 | Renewal |

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 has been 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.

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

Emission Unit 01 - TC1 Indirect Heat Exchanger

| | |
|-------------------------|---|
| Description: | Dry bottom, tangentially fired boiler |
| Primary fuel: | Pulverized coal; up to forty (40) percent petroleum coke co-firing with coal |
| Secondary fuel: | Ultra-low sulfur diesel fuel (ULSD) and natural gas used for startups and flame stabilization |
| Design capacity rating: | 5,333 MMBtu/hour |
| Commenced construction: | before 1978 |
| Controls: | Selective catalytic reduction (SCR) Dry sorbent injection (DSI) Dry Electrostatic precipitator (DESP) Pulse-jet fabric filter (PJFF) with powdered activated carbon (PAC) injection Wet flue gas desulfurization (WFGD) |

Applicable Regulations:

- 401 KAR 51:017, *Prevention of significant deterioration of air quality*
- 401 KAR 51:160, *NO_x requirements for large utility and industrial boilers* (See **Section K**)
- 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 SO₂ trading program* (see **Section K**)
- 401 KAR 52:060, *Acid rain permits*, incorporating the Federal Acid Rain provisions as codified in 40 CFR Parts 72 through 78 (See **Section J**)
- 401 KAR 59:015, *New indirect heat exchangers*
- 401 KAR 60:005, **Section 2(2)(a)**, 40 C.F.R. 60.40 through 60.46 (**Subpart D**), *Standards of Performance for Fossil-Fuel-Fired Steam Generators*
- 401 KAR 60:005, **Section 2(3)**, 40 C.F.R. Part 60, Appendix F, *Quality Assurance Procedures*
- 401 KAR 63:002, **Section 2(2)(yyyy)**, 40 C.F.R. 63.9980 through 63.10042, Tables 1 through 9, and Appendices A through E (**Subpart UUUUU**), *National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units*
- 40 CFR 64, *Compliance Assurance Monitoring* (PM, SO₂, and NO_x)
- 40 CFR 97, **Subpart AAAAA**, *CSAPR NO_x Annual Trading Program* (See **Section L**)
- 40 CFR 97, **Subpart CCCCC**, *CSAPR SO₂ Group 1 Trading Program* (See **Section L**)
- 40 CFR 97, **Subpart GGGGG**, *CSAPR NO_x Ozone Season Group 3 Trading Program* (See **Section L**)

1. Operating Limitations:

- During a startup period or a shutdown period, the permittee shall comply with the work practice standards established in Table 3 of 40 CFR 63, Subpart UUUUU. [401 KAR 59:015, Section 7(2)(b)]
- Requirements of 40 CFR 63, Subpart UUUUU are listed in **Section D - Source Emission Limitations and Testing Requirements**.

2. Emission Limitations:

- a. The permittee shall restrict emissions from the stack of Emission Unit 01 according to the following table:

| Pollutant | Limit & Averaging Period | Regulatory Citation | Compliance Demonstration |
|------------------|--|--|---|
| PM | 0.10 lb/MMBtu, 3-hour average | 401 KAR 51:017, 40 CFR 60.42(a)(1) | Stack testing, see 3.a. & b. PM CEMS, see 4.a. [40 CFR 60.42(c)] |
| Opacity | 20 percent, except for one 6-minute period of not more than 27 percent | 40 CFR 60.42(a)(2) | Method 9 testing according to 40 CFR 60.45(b)(7). See 3.b. & 4.h. |
| SO ₂ | 0.84 lb/MMBtu, 3-hour rolling average | 401 KAR 51:017 | SO ₂ CEMS, see 4.b. & c. |
| | AND | | |
| | 1.2 lb/MMBtu, 3-hour rolling average | 40 CFR 60.43 (a)(2) | SO ₂ CEMS, see 4.b. & c. |
| | AND | | |
| | 4,822 ton/yr, 12-month rolling total | Voluntary limit to preclude 401 KAR 51:001, Section 1(144) | SO ₂ CEMS, see 4.b., c. & f. Calculate, see 5.d. Report, see 6.b. |
| NO _x | 0.70 lb/MMBtu, 3-hour rolling average | 40 CFR 60.44(a)(3) | NO _x CEMS, see 4.b. & d. |
| | AND | | |
| | 5,556 tons/yr, 12-month rolling total | Voluntary limit to preclude 401 KAR 51:001, Section 1(144) | NO _x CEMS, see 4.b., d. & f. Calculate, see 5.d. Report, see 6.b. |

- b. Additional requirements of 40 CFR 63, Subpart UUUUU are listed in **Section D - Source Emission Limitations and Testing Requirements.**
- c. Nitrogen oxides emissions expressed as nitrogen dioxide shall not exceed 0.40 lb/MMBtu on an annual basis. See **Section J - Acid Rain.** [40 CFR Part 76]

3. Testing Requirements:

- a. To demonstrate compliance with 40 CFR 60, Subpart D, the permittee shall conduct a performance test for PM emissions according to 40 CFR 60.46 within five (5) years of the most recently approved stack test. Performance testing shall be conducted at a minimum of every five (5) years. [401 KAR 50:045]

b. Test Summary Table:

| Emission | Test Method | Frequency |
|----------|---|---|
| PM | Method 5B or other acceptable test methods approved by the Division | Once Every 5 Years |
| Opacity | 3-hr. Method 9 | Once Every Year and As Required By 40 CFR 60.45(b)(7) |

- c. Testing shall be conducted at such times as may be requested by the Division. [401 KAR 50:045, Section 1]
- d. Additional requirements of 40 CFR 63, Subpart UUUUU are listed in **Section D - Source Emission Limitations and Testing Requirements**.

4. Specific Monitoring Requirements:

- a. The permittee shall install, calibrate, and maintain a certified PM CEMS. PM CEMS shall comply with performance specification 11 of Appendix B to 40 CFR 60 and ongoing quality assurance requirements per Procedure 2 of Appendix F to 40 CFR 60. The PM CEMS shall be used to satisfy CAM requirements [40 CFR 64.3(d)(2)].
- b. CEMS shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide (SO₂) emissions, nitrogen oxides (NO_x) emissions and either oxygen or carbon dioxide emissions [40 CFR 60.45(a)]. The CEMS shall comply with performance specifications 2 and 3 of Appendix B to 40 CFR 60 or 40 CFR 75, Appendix A. CEMS shall be used to satisfy CAM requirements [40 CFR 64.3(d)(2)].
- c. Excluding the startup and shut down periods, if any three (3)-hour average sulfur dioxide value exceeds the standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and the CEMS and make any necessary repairs as soon as practicable [401 KAR 52:020, Section 10].
- d. Excluding the startup and shut down periods, if any three (3)-hour average NO_x value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and the CEM system and make any necessary repairs or take corrective actions as soon as practicable [401 KAR 52:020, Section 10].
- e. Performance evaluations of SO₂ CEMS and NO_x CEMS, including reference methods, calibration gases, and span values, shall be according to 40 CFR 60.45. [40 CFR 60.45(c)]
- f. The permittee shall monitor emissions of SO₂ and NO_x, in tons, on a monthly basis. [401 KAR 51:017]
- g. Continuous emission monitoring data shall be converted into the units of applicable standards using the conversion procedure described in 40 CFR 60.45(e).
- h. Method 9 testing shall be performed according to the incremental schedule of 40 CFR 60.45(b)(7).

- i. The permittee shall perform and report Quality Assurance (QA) procedures for NO_x and SO₂ CEMS specified in Appendix F of 40 CFR 60, according to the schedule for Quality Assurance procedures specified in Appendix B of 40 CFR 75.
- j. The permittee shall install, calibrate, operate, test, and monitor all continuous monitoring systems and monitoring devices in accordance with 40 CFR 60.13 or 40 CFR 75.
- k. Additional requirements of 40 CFR 63, Subpart UUUUU are listed in **Section D - Source Emission Limitations and Testing Requirements**.

5. Specific Recordkeeping Requirements:

- a. The permittee shall record and maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative. [401 KAR 52:020, Section 10 and 401 KAR 59:005, Section 3(2)]
- b. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurement; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 401 KAR 59:005 recorded in a permanent form suitable for inspection. The file shall be retained for at least two (2) years following the date of such measurements, maintenance, reports, and records. [401 KAR 52:020, Section 10 and 401 KAR 59:005, Section 3(4)]
- c. The permittee shall maintain Method 9 observations in a designated logbook or an electronic format. Records shall be maintained for not less than five (5) years [401 KAR 52:020, Section 10].
- d. The permittee shall calculate emissions of SO₂ and NO_x, in tons, on a consecutive twelve (12)-month rolling total basis. [401 KAR 51:017]
- e. Additional requirements of 40 CFR 63, Subpart UUUUU are listed in **Section D - Source Emission Limitations and Testing Requirements**.

6. Specific Reporting Requirements:

- a. Excess emissions and monitoring system performance reports for opacity, SO₂, NO_x, and PM shall be submitted to the Division's Florence Regional Office semiannually according to 40 CFR 60.45(g).
- b. Minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. The permittee shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division's Florence Regional Office. The averaging period used for data reporting should correspond to the averaging period specified in the emission test method used to determine compliance with an emission standard for the pollutant/source category in question. All quarterly reports

shall be submitted electronically or postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information: [401 KAR 59:005, Section 3(3)]

- i. The magnitude of the excess emissions computed in accordance with 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions;
 - ii. All hourly averages shall be reported for SO₂ and NO_x monitors. The hourly averages shall be made available in the format specified by the Division;
 - iii. Specific identification of each period of excess emissions that occur during start-ups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted;
 - iv. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments;
 - v. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
- c. For exceedances that occur as a result of start-up, the permittee shall report: [401 KAR 52:020, Section 10]
- i. The type of start-up (cold, warm, or hot);
 - ii. Whether or not the duration of the start-up exceeded the manufacturer's recommendation or typical, historical durations, and if so, an explanation of why the start-up exceeded recommended or typical durations.

7. Specific Control Equipment Operating Conditions:

- a. The electrostatic precipitator (ESP), pulse-jet fabric filter with PAC injection, SO₂ scrubber (FGD), and selective catalytic reduction (SCR) shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and standard operating practices [401 KAR 50:055, Section 2].
- b. Records regarding the maintenance (e.g., routine scheduled service, replacement of parts, etc.) of the control equipment shall be maintained. [401 KAR 59:005 and 40 CFR 63.10032]
- c. See **Section E - Source Control Equipment Requirements**, for further requirements.

Emission Unit 31 - TC2 Indirect Heat Exchanger

| | |
|-------------------------|--|
| Description: | Supercritical boiler |
| Primary fuel: | Pulverized coal |
| Secondary fuel: | Ultra-low sulfur diesel fuel (ULSD) and natural gas used for startups and flame stabilization |
| Design capacity rating: | 6,942 MMBtu/hour |
| Commenced construction: | 2006 |
| Controls: | Selective catalytic reduction (SCR) Dry sorbent injection (DSI) Dry electrostatic precipitator (DESP) Wet electrostatic precipitator (WESP) Pulse-jet fabric filter (PJFF) Powdered activated carbon (PAC) injection Wet flue gas desulfurization (WFGD) |

APPLICABLE REGULATIONS:

- 401 KAR 51:017**, *Prevention of significant deterioration of air quality*
- 401 KAR 51:160**, *NO_x requirements for large utility and industrial boilers* (see **Section K**)
- 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 SO₂ trading program* (see **Section K**)
- 401 KAR 52:060**, *Acid rain permits* (See **Section J**)
- 401 KAR 59:015**, *New indirect heat exchangers*
- 401 KAR 60:005, Section 2(2)(b)**, 40 C.F.R. 60.40Da through 60.52Da (**Subpart Da**), *Standards of Performance for Electric Utility Steam Generating Units*
- 401 KAR 60:005, Section 2(3)**, 40 CFR. Part 60, Appendix F, *Quality Assurance Procedures*
- 401 KAR 63:002, Section 2(2)(yyyy)**, 40 C.F.R. 63.9980 through 63.10042, Tables 1 through 9, and Appendices A through E (**Subpart UUUUU**), *National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units*
- 40 CFR 64**, *Compliance Assurance Monitoring (PM, SO₂, NO_x, H₂SO₄ and Fluoride)*
- 40 CFR Parts 72 to 78**, *Federal acid rain provisions* Compliance with 40 CFR 75, Continuous Emissions Monitoring, shall constitute compliance with the monitoring and quality assurance requirements of 40 CFR 60.49 Da and 40 CFR 60, Appendix F. (See **Section J**)
- 40 CFR 97, Subpart AAAAA**, *CSAPR NO_x Annual Trading Program* (See **Section L**)
- 40 CFR 97, Subpart CCCCC**, *CSAPR SO₂ Group 1 Trading Program* (See **Section L**)
- 40 CFR 97, Subpart GGGGG**, *CSAPR NO_x Ozone Season Group 3 Trading Program* (See **Section L**)

1. Operating Limitations:

- a. The permittee shall utilize control devices selected as BACT. [401 KAR 51:017].
 - BACT for PM/PM₁₀ is PJFF.
 - BACT for CO is good combustion controls.
 - BACT for H₂SO₄ mist is WESP.

- BACT for fluorides (as HF) is WFGD.
 - BACT does not apply to NO_x and SO₂.
 - If using fuel oil, only ASTM Grade No. 2-D S15 (Ultra Low Sulfur Diesel-ULSD) or equivalent with a sulfur content not to exceed 15 ppm shall be used for startup and stabilization.
- b. During a startup period or a shutdown period, the permittee shall comply with the work practice standards established in Table 3 of 40 CFR 63, Subpart UUUUU. [401 KAR 59:015, Section 7(2)(b)]
- c. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control devices and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). [40 CFR 64.7(d)(1)]
- d. Requirements of 40 CFR 63, Subpart UUUUU are listed in **Section D - Source Emission Limitations and Testing Requirements**.

2. Emission Limitations:

- a. The permittee shall restrict emissions from the stack of Emission Unit 31 according to the following table:

| Pollutant | Limit & Averaging Period | Regulatory Citation | Compliance Demonstration |
|---|--|----------------------------|--|
| PM ₁₀ (filterable) | 0.018 lb/MMBtu, Average of three 1-hour tests | 401 KAR 51:017 | Stack testing, see 3.a. & b. |
| PM (filterable) | 0.015 lb/MMBtu, 24-hour daily block average | 40 CFR 60.42Da(c)(2) | PM CEMS, see 4.a. & e. Calculated according to 40 CFR 60.48Da(p) |
| PM, PM ₁₀ during startup and shutdown | 125 lb/hr per 30 day rolling average | 401 KAR 51:017 | PM CEMS, see 2.b. |
| Opacity | Exempt | 40 CFR 60.42Da(b)(1) | N/A |
| SO ₂ | 8.94 tons per calendar day; | 401 KAR 51:017 | SO ₂ CEMS, see 4.a. & b. Reported, see 6.a. & d. |
| AND | | | |

| Pollutant | Limit & Averaging Period | Regulatory Citation | Compliance Demonstration |
|-----------------|--|-----------------------------------|---|
| | 3,263.1 tons, 12-consecutive months total | 401 KAR 51:017 | Monitored, see 4.a., b., e. & i. Calculated, see 5.e. Reported, see 6.e. |
| | AND | | |
| | 1.4 lb/MWh gross energy output based on a 30-day rolling average | 40 CFR 60.43Da(i) | SO ₂ CEMS, see 4.a., b. & e. Calculate, see 40 CFR 60.48Da(b) |
| | OR | | |
| 95% reduction | | | |
| CO | 0.10 lb/MMBtu, 30-day rolling average | 401 KAR 51:017 | CO CEMS, see 4.a. & f. See 6.a.xii. Note: Compliance with the 3-hr rolling average of 3,471 lb/hr is considered compliance with the 3-hr rolling average of 0.5 lb/MMBtu. |
| | OR | | |
| | 0.5 lb/MMBtu, 3-hour rolling average | | |
| | AND | | |
| | 3,471 lb/hr, 8-hour average | See Note 1. | CO CEMS, see 4.a. & f. Reporting, see 6.a. |
| | AND | | |
| | 3,471 lb/hr, 3-hour rolling average | See Note 1. | CO CEMS, see 4.a. & f. See 6.a.xii. Note: Compliance with the 3-hr rolling average of 3,471 lb/hr is considered compliance with the 3-hr rolling average of 0.5 lb/MMBtu. |
| AND | | | |
| | 3,471 lb/hr, 30-day rolling average | Short term limits, 401 KAR 51:017 | See 2.b. |
| NO _x | 4.17 tons per calendar day | 401 KAR 51:017 | NO _x CEMS, see 4.a., c. & e. Reporting, see 6.a. & d. |

| Pollutant | Limit & Averaging Period | Regulatory Citation | Compliance Demonstration |
|-----------|---|---------------------|---|
| | AND | | |
| | 1,506.72 tons per 12 consecutive month rolling total | 401 KAR 51:017 | NO _x CEMS, see 4.a. and i. Calculating, see 5.e. Reporting, see 6.e. |
| | AND | | |
| | 1.0 lb/MWh gross energy output, 30-day rolling average | See Note 2. | NO _x CEMS, see 4.a., c. & e. |
| VOC | 0.0032 lb/MMBtu, 3-hour rolling average | 401 KAR 51:017 | Compliance with CO limits of: 0.1 lb/MMBtu on a 30-day rolling average |
| | | | OR |
| | | | |
| | AND | | |
| | 22 lb/hr, 30-day rolling average | 401 KAR 51:017 | See 2.b. |
| SAM | 26.6 lb/hr, 3-hour rolling average (CAM indicator – 2.78 lb/MW hr, 3-hr rolling average) | 401 KAR 51:017 | SO ₂ CEMS, see CAM table 4.k. |
| | AND | | |
| | 26.6 lb/hr, 30-day rolling average | 401 KAR 51:017 | See 2.b. |
| Fluorides | 1.55 lb/hr, 3-hour rolling average (CAM indicator – 1.738 lb/MW hr, 3-hr rolling average) | 401 KAR 51:017 | SO ₂ CEMS, see CAM table 4.k. |
| | AND | | |
| | 1.55 lb/hr, 30-day rolling average | 401 KAR 51:017 | See 2.b. |

Note 1: *Secretary's Final Order, DAQ-27602-042, Filed September 28, 2007, for the purposes of ensuring compliance with 401 KAR 53:010, Ambient Air Quality Standards].*

Note 2: 40 CFR 60.44Da(e). Compliance with this limitation shall constitute compliance with the 65% reduction requirement contained in 40 CFR 60.44Da(a)(2).

- b. The limits for PM₁₀, CO, VOC, SAM, and fluorides in table **2.a.** above are the best available control technology limits at all times, except during startup and shutdown events.

However, to determine compliance with the tons per year limits specified in the permit, emissions during startup and shutdown shall be included. The permittee shall utilize good work and maintenance practices and manufacturer’s recommendations to minimize emissions at all times. [401 KAR 51:017]

For short term limits during startup events and shutdown events, emissions of PM/PM₁₀ shall not exceed 125 lb/hr based on 30-day rolling average, emissions of carbon monoxide shall not exceed 3,471 lb/hr based on 30-day rolling average, emissions of VOC shall not exceed 22 lb/hr based on 30-day rolling average, emissions of SAM shall not exceed 26.6 lb/hr based on a 30-day rolling average and emissions of fluorides shall not exceed 1.55 lb/hr based on 30-day rolling average [401 KAR 51:017]. Compliance with these limits shall be based upon a thirty (30)-day average. This thirty (30)-day average shall be determined as follows; for start-up events, the period shall begin at the initiation of the start-up event and include the following seven-hundred-twenty (720) operating hours to obtain the thirty (30)-day average. For shut-down events, the period shall include the shutdown event and the preceding seven-hundred-twenty (720) operating hours to obtain the thirty (30)-day average.

A “startup event” shall be the setting in operation of the PC boiler for any purpose, beginning with the ignition of fuel oil in the boiler and ending when the generator has achieved and sustained 30-40% of its nominal rating (750 MW) for a period of at least one (1) hour. A startup event shall not exceed twenty-four (24) hours, except to avoid equipment damage, unsafe operation, or deviation from established original equipment manufacturer (OEM) procedure. A “shutdown event” is considered as the cessation of operation of the PC boiler, beginning with the generator going below 375 MW, curtailment of the fuel supply to the boilers, and ending after fuel flow has ceased. A shutdown event shall not exceed ten (10) hours. For a startup event lasting longer than twenty-four (24) hours and a shutdown event lasting longer than ten (10) hours, the permittee shall record the time, date, type of event (startup and shutdown), duration of the event and shall specify the cause of the exceedance and provide measures that will be taken to prevent such exceedances. [401 KAR 51:017]

- c. Additional requirements of 40 CFR 63, Subpart UUUUU are listed in **Section D - Source Emission Limitations and Testing Requirements**.

3. Testing Requirements:

- a. The permittee shall submit a schedule within five (5) years of the most recent stack test, according to 401 KAR 50:045, to test for particulate matter (PM) smaller than 10 microns to demonstrate compliance with 401 KAR 51:017. Testing shall be conducted at a minimum of every five (5) years. [401 KAR 50:045]
- b. Test Summary Table:

| Emission | Test Method | Frequency |
|-------------------------------------|---|---------------|
| PM/PM ₁₀ (Filterable) | Method 5B or other acceptable test methods approved by the Division | Every 5 Years |

- c. Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]
- d. Additional requirements of 40 CFR 63, Subpart UUUUU are listed in **Section D - Source Emission Limitations and Testing Requirements**.

4. Specific Monitoring Requirements:

- a. The permittee shall install, calibrate, maintain, and operate continuous monitoring systems for measuring SO₂ emissions, CO emissions, NO_x emissions, PM emissions, mercury emissions, and either oxygen or carbon dioxide diluents. Oxygen or carbon dioxide shall be monitored at each location where SO₂ or NO_x emissions are monitored. The permittee shall ensure the continuous monitoring systems are in compliance with the requirements of 40 CFR 60.49Da, 40 CFR part 75, and the Performance Specifications of Appendix B to 40 CFR part 60 [401 KAR 52:020, and 401 KAR 51:017, and 40 CFR 60.49Da]. CEMS shall be used to satisfy CAM requirements [40 CFR 64.3(d)(2)]. Monitoring the CO 3-hr rolling average of 3,471 lb/hr limit covers the monitoring requirement of the 3-hr rolling average of 0.5 lb/MMBtu CO limit.
- b. If any thirty (30) day rolling average emissions of SO₂ (excluding the startup and shut down periods) exceed 1.4 lb/MWh gross energy output, or if any calendar day emissions (excluding startup and shutdown) exceed 8.94 tons per day, the permittee shall, as appropriate, initiate an inspection of the control equipment or the CEM system and make any necessary repairs as soon as practicable [401 KAR 52:020 and 40 CFR 75.10].
- c. If any thirty (30) day rolling average emissions of NO_x (excluding the startup and shut down periods) exceed 1.0 lb/MWh gross energy output, or if any calendar day emissions (excluding startup and shutdown) exceed 4.17 tons per day, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the CEM system and make any necessary repairs as soon as practicable [401 KAR 52:020, 40 CFR 60.49Da(c) and 40 CFR 75.10].
- d. All of the CEMS shall be operated and data shall be recorded during all periods of operation of the emissions units including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments [40 CFR 60.49Da(e)].
- e. The permittee shall obtain emissions data for PM, NO_x, and SO₂ for at least 90 percent of all operating hours for each thirty (30) successive boiler operating days. If this minimum data requirement cannot be met with a CEMS, the permittee shall supplement emissions data with other monitoring systems as described in 40 CFR 60.49Da(h) [40 CFR 60.49Da(f)(2)] or by use of 40 CFR 75, Subpart D, *Missing Data Substitution Procedures* (for NO_x and SO₂).
- f. When emissions data for pollutants other than PM, NO_x, and SO₂ are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, the permittee shall obtain emissions data by using other monitoring systems as approved by the Division or other data substitution methods, including 40 CFR

75, to provide emissions data for a minimum of eighteen (18) hours in at least twenty-two (22) out of thirty (30) successive boiler operating days [401 KAR 52:020, Section 10].

- g. The following procedures shall be used to conduct monitoring system performance evaluations and calibration checks as required under 40 CFR 60.49Da:
- i. Reference Method 6 or 7 as applicable shall be used for conducting performance evaluations of sulfur dioxide and nitrogen oxides CEMS
 - ii. Sulfur dioxide or nitrogen oxides, as applicable, shall be used for preparing calibration mixtures under Performance Specifications 2 of Appendix B to 40 CFR 60 incorporated by reference in 401 KAR 50:015, or under 40 CFR 75.
 - iii. The span value for the continuous monitoring system for measuring nitrogen oxides shall be 1,000 ppm, or span values as specified in 40 CFR 75, Appendix A.
 - iv. The span value for the continuous monitoring system for measuring sulfur dioxide at the outlet of the control device shall be 50 percent of the maximum estimated hourly potential emissions of the fuel fired, or span values as specified in 40 CFR 75, Appendix A
- h. The permittee shall use SO₂, NO_x, and PM CEMS as continuous compliance determination methods consistent with 40 CFR part 64, as applicable, to satisfy CAM requirements. [40 CFR 64.3(d)(2)]
- i. The permittee shall monitor emissions of SO₂ and NO_x, in tons, on a monthly basis [401 KAR 51:017].
- j. The permittee shall perform and report Quality Assurance (QA) procedures for CO, NO_x, and SO₂ CEMS specified in Appendix F of 40 CFR 60, according to the schedule for QA procedures specified in Appendix B of 40 CFR 75.
- k. The permittee shall install, calibrate, operate, test, and monitor all continuous monitoring systems and monitoring devices in accordance with 40 CFR 60.13 or 40 CFR 75. Testing frequency, linearity checks, applicable specifications, data validation, out-of-control criteria, and grace period provisions in Appendix B to 40 CFR part 75 apply to all NO_x and SO₂ CEMS. Testing frequency, data validation, out-of-control criteria, and grace period provisions in Appendix B to 40 CFR part 75, and the specifications in Appendix B and Appendix F to 40 CFR part 60 apply to all CO CEMS.
- l. Monitoring for H₂SO₄ and Fluoride is shown in the table below [40 CFR 64.6].

| CAM Monitoring Approach | | Pollutant #1 | Pollutant #2 |
|-------------------------|----------------------|--|------------------------------------|
| I. | Indicator | H ₂ SO ₄ Mist | Fluoride |
| A. | Measurement Approach | SO ₂ CEMS data (lb/MWh) OR WESP liquid flow rate, voltage, secondary currents and/or other operating parameters, shall be monitored | SO ₂ CEMS data (lb/MWh) |

| CAM Monitoring Approach | | Pollutant #1 | Pollutant #2 |
|-------------------------|------------------------------------|---|--|
| I. | Indicator | H₂SO₄ Mist | Fluoride |
| II. | Indicator Range | An excursion is a SO ₂ CEMS reading of more than 2.78 lb/MWhr, on a 3-hr rolling average OR Outside of acceptable WESP ranges Secondary voltage: 50-60 kV Secondary current: 7-350 mA Flow: 180–290 gpm Or most recent performance test ranges/limits, based on a 3-hour rolling average | An excursion is a SO ₂ CEMS reading of more than 1.738 lb/MWhr, on a 3-hr rolling average. |
| III. | Performance Criteria | SO ₂ CEMS and WESP (if used as an indicator) shall follow the installation, calibration, and startup procedures recommended by the manufacturer of the CEMS and WESP equipment (as applicable) | SO ₂ CEMS shall follow the installation, calibration, and startup procedures recommended by the manufacturer of the CEMS equipment |
| A. | Data Representativeness | SO ₂ CEMS shall be installed in the TC2 stack flues. Accuracy of the emission monitoring will be in accordance with 40 CFR 75 monitoring system provisions. | SO ₂ CEMS shall be installed in the TC2 stack flues. Accuracy of the emission monitoring will be in accordance with 40 CFR 75 monitoring system provisions. |
| B. | Verification of Operational Status | RATA shall be conducted at least once every four calendar quarters, except as otherwise noted in Section 5.1.4 of 40 CFR 60, Appendix F | RATA shall be conducted at least once every four calendar quarters, except as otherwise noted in Section 5.1.4 of 40 CFR 60, Appendix F |
| C. | QA/QC Practices and Criteria | SO ₂ CEMS and WESP (if used as an indicator) will be calibrated, maintained and operated in accordance with manufacturer specifications and recommendations | WFGD and SO ₂ CEMS will be maintained and operated in accordance with manufacturer specifications and recommendations |
| D. | Monitoring Frequency | SO ₂ CEMS: Continuous (Reading at least once every 15 minutes) OR WESP Operating Parameters: Continuous (Reading at least every 15 minutes) or as determined by performance testing | Continuous (Reading at least once every 15 minutes) |
| IV. | Data Collection Procedures | Process logic controller captures readings electronically and sends them to a data storage drive, where the information can be monitored and trended | Process logic controller captures readings electronically and sends them to a data storage drive, where the information can be monitored and trended |
| V. | Averaging Period | 3-hour rolling | 3-hour rolling |
| VI. | Recordkeeping | Electronic archives of SO ₂ emissions data and SAM calculations; OR Electronic archives of parameter data AND | Electronic archives of SO ₂ emissions data and fluoride calculations; AND |

| CAM Monitoring Approach | | Pollutant #1 | Pollutant #2 |
|-------------------------|------------------|--|--|
| I. | Indicator | H₂SO₄ Mist | Fluoride |
| | | Causes and corrective actions taken associated with any excursions, noted in the maintenance log; AND Documentation and records of monitoring device calibrations. | Causes and corrective actions taken associated with any excursions, noted in the maintenance log; AND Documentation and records of monitoring device calibrations. |
| VII | Reporting | See 6.d. | See 6.d. |

- m. Additional requirements of 40 CFR 63, Subpart UUUUU are listed in **Section D - Source Emission Limitations and Testing Requirements.**

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain a record of applicable measurements, including CEM system, monitoring device, and performance testing measurements; all CEM system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by 40 CFR 60.7 recorded in a permanent form suitable for inspection [40 CFR 60.52Da].
- b. The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility, any malfunction of the air pollution control equipment; or any period during which a CEM system or emission monitoring device is inoperative [40 CFR 60.7].
- c. The permittee shall record on a daily basis for the WFGD the following [40 CFR 64.9(b)]:
 - i. The WFGD liquid pH in the reaction tank;
 - ii. Recycle pump amps and status.
- d. The permittee shall record, on a daily basis, voltages, or other parameters identified during the performance test for the WESP, as approved by the Division [40 CFR 64.9(b)].
- e. The permittee shall calculate emissions of SO₂ and NO_x in tons, on a consecutive twelve (12)-month rolling total [401 KAR 51:017].
- f. Additional requirements of 40 CFR 63, Subpart UUUUU are listed in **Section D - Source Emission Limitations and Testing Requirements.**

6. Specific Reporting Requirements:

- a. Minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. The permittee shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division's Florence Regional Office. All quarterly reports shall be submitted electronically or postmarked by

the thirtieth (30th) day following the end of each calendar quarter and shall include the following information: [40 CFR 60.51Da].

- i. The magnitude of the excess emissions computed in accordance with 40 CFR 60.7, any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
 - ii. All hourly averages shall be reported for SO₂ and NO_x monitors. The hourly averages shall be made available in the format specified by the Division.
 - iii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The permittee shall determine the nature and cause of any malfunction (if known), and initiate the corrective action taken or preventive measures adopted.
 - iv. The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - v. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
 - vi. For SO₂ and NO_x, all information listed in 40 CFR 60.51Da (b)(1 thru 9) shall be reported to the Division for each twenty-four (24) hour period.
 - vii. If the minimum quantity of emissions data as required by 40 CFR 60.49Da is not obtained for any thirty (30) successive boiler operating days, the information specified in 40 CFR 60.51Da(c), obtained under the requirements of 40 CFR 60.48Da, shall be reported for that thirty (30)-day period.
 - viii. If any SO₂ standards as specified in 40 CFR 60.43 Da are exceeded during emergency conditions because of control system malfunction, the permittee shall submit a signed statement including all information as described in 40 CFR 60.51Da(d).
 - ix. For any periods for which SO₂ or NO_x emissions data are not available, the permittee shall submit a signed statement pursuant to 40 CFR 60.51Da(f) indicating if any changes were made in the operation of the emission control system during the period of data unavailability. Operations of control system and emissions units during periods of data unavailability are to be compared with operation of the control system and emissions units before and following the period of data unavailability.
 - x. The permittee shall submit a signed statement including all information as described in 40 CFR 60.51Da(h).
 - xi. For the purposes of the reports required under 401 KAR 59:005, Section 4, as specified in 40 CFR 60.42Da(b), the permittee is exempt from the opacity standard of 40 CFR 60 Da. The CEM systems for SO₂ and NO_x shall be certified, operated and maintained in accordance with the applicable provisions of 40 CFR 75, compliance with which shall be deemed compliance with monitoring provisions of 40 CFR 60.49Da [40 CFR 60.51Da(i)].
 - xii. Reporting of the 3,471 lb/hr on a 3-hr rolling average CO limit, covers the reporting requirement for the 0.5 lb/MMBtu on a 3-hr rolling average of CO limit.
- b. Excess emissions for emission units using a continuous monitoring system for measuring particulate matter are defined by any rolling twenty-four (24)-hour average of particulate matter, in units of pounds per million Btu (lb/MMBtu), greater than the applicable standard

for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced, instantaneous particulate matter measurements per hour. Any time period exempted shall be considered before determining the excess average of particulate matter [401 KAR 52:020, Section 10].

- c. The permittee shall report the number of excursions (excluding startup, shut down, malfunction data) above the particulate matter standard, date and time of excursions, particulate matter value of the excursions, and percentage of the PM-CEMS data showing excursions above the applicable standard in each calendar quarter [401 KAR 52:020, Section 10]. For exceedances that occur as a result of start-up, the permittee shall report [401 KAR 52:020, Section 10]:
 - i. The type of start-up (cold, warm, or hot);
 - ii. Whether or not the duration of the start-up exceeded the manufacturer's recommendation or typical, historical durations, and if so, an explanation of why the start-up exceeded recommended or typical durations.
- d. The permittee shall report the following information regarding its CAM plan according to the general reporting requirements specified in Section F.5. of this permit: [40 CFR 64.9(a)]
 - i. Number of exceedances or excursions;
 - ii. Duration of each exceedance or excursion;
 - iii. Cause of each exceedance or excursion;
 - iv. Corrective actions taken on each exceedance or excursion;
 - v. Number of monitoring equipment downtime incidents;
 - vi. Duration of each monitoring equipment downtime incident;
 - vii. Cause of each monitoring equipment downtime incident;
 - viii. Description of actions taken to implement a quality improvement plan and upon completion of the quality improvement plan, documentation that the plan was completed and reduced the likelihood of similar excursions or exceedances.
- e. The permittee shall report semiannually the twelve (12) month rolling total SO₂ and NO_x emissions [401 KAR 52:020, Section 10].
- f. Additional requirements of 40 CFR 63, Subpart UUUUU are listed in **Section D - Source Emission Limitations and Testing Requirements**.

7. Specific Control Equipment Operating Conditions:

- a. The selective catalytic reduction, pulse-jet fabric filter, wet flue gas desulfurization, dry sorbent injection, dry electrostatic precipitator, wet electrostatic precipitator, and powdered activated carbon injection shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and standard operating practices [401 KAR 50:055, Section 2(5)].
- b. Records regarding the maintenance of the control equipment shall be maintained [401 KAR 59:005, Section 3(4)].

- c. See **Section E - Source Control Equipment Requirements** for further requirements.

Emission Unit 32 - "Limited Use" Auxiliary Steam Boiler

Description:

Design capacity rating: 100 MMBtu/hour
Commenced construction: 2007
Fuel: Ultra Low Sulfur Diesel (ULSD) or natural gas

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

401 KAR 59:015, *New indirect heat exchangers*

401 KAR 60:005, Section 2(2)(d) 40 C.F.R. 60.40c through 60.48c (**Subpart Dc**), *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*

401 KAR 60:005, Section 2(3), 40 CFR. Part 60, Appendix F, *Quality Assurance Procedures*

401 KAR 63:002, Section 2.(4)(iii), 40 C.F.R. 63.7480 through 63.7575, Tables 1 through 13 (**Subpart DDDDD**), *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*

1. Operating Limitations:

- a. The fuel consumed in this unit shall be limited to 87,595 MMBtu/yr, based on a twelve (12)-month rolling total. This federally-enforceable limit is less than 10% of the maximum potential heat input [to achieve limited applicability of 40 CFR 63, Subpart DDDDD, as a limited-use boiler, pursuant to 40 CFR 63.7575].

Compliance Demonstration Method:

Compliance with the limited-use operating limit shall be demonstrated by monitoring according to **4. Specific Monitoring Requirements**, and recordkeeping according to **5. Specific Recordkeeping Requirements a.**

- b. The permittee shall complete a tune-up of the boiler every five (5) years as specified in 40 CFR 63.7540(a)(12) [40 CFR 63.7500(c)].

Compliance Demonstration Method:

Compliance with the tune-up operating limit shall be demonstrated by reporting according to **6. Specific Reporting Requirements b.**

- c. At all times the permittee shall operate and maintain the unit in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Division that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source [40 CFR 63.7500(a)(3)]. During a startup period or a shutdown period, the permittee shall comply with the work practice standards established in Table 3 of 40 CFR 63, Subpart DDDDD [401 KAR 59:015, Section 7(2)(a)]

- d. The ULSD, if used, shall meet the sulfur content standards in ASTM Grade No. 2-D S15 (Ultra Low Sulfur Diesel-ULSD) or equivalent and cannot exceed a sulfur content of 15 ppm [401 KAR 51:017]. This satisfies the percent sulfur by weight requirement of 40 CFR 60.42c(d).

Compliance Demonstration Method:

Compliance with the ULSD operating limit shall be demonstrated by recordkeeping of vendor certifications according to **5. Specific Recordkeeping Requirements b.**

- e. The permittee shall comply with all applicable provisions of 40 CFR 63, Subpart DDDDD [40 CFR 63.7495(b)].

2. Emission Limitations:

- a. PM emissions shall not exceed 0.03 lb/MMBtu or 3.0 lb/hr based on a three (3) hour average [401 KAR 51:017]. This unit is exempt from PM limits from 40 CFR 60, Subpart Dc [40 CFR 60.43c(e)(4)].

Compliance Demonstration Method:

Compliance with the 401 KAR 51:017 PM limit is demonstrated by stack testing performed in 2009.

- b. While combusting natural gas, the permittee shall not cause emissions of particulate matter in excess of twenty percent opacity, except: [401 KAR 59:015, Section 4(2)]
- i. A maximum of forty percent opacity shall be allowed for one 6-minute period in any 60 consecutive minutes; [401 KAR 59:015, Section 4(2)(a)]
- ii. For emissions caused by building a new fire, emissions during the period required to bring the boiler up to operating conditions shall be allowed, if the method used is recommended by the manufacturer and the time does not exceed the manufacturer's recommendations. [401 KAR 59:015, Section 4(2)(c)]

Compliance Demonstration Method:

Compliance with the 401 KAR 59:015 opacity limit is assumed while the boiler is combusting natural gas.

- c. At all times, except during periods of startup, shutdown, or malfunction, opacity from this unit during ULSD combustion shall not exceed 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent opacity [40 CFR 60.43c(c) and 40 CFR 60.43c(d)].

Compliance Demonstration Method:

Compliance with the opacity limit shall be demonstrated by U.S. EPA Reference Method 9 testing according to **3. Testing Requirements a.**

- d. CO emissions shall not exceed 100 ppm by volume on a dry basis corrected to 3 percent oxygen or 0.078 lb/MMBtu on a thirty (30)-day rolling average [401 KAR 51:017].

Compliance Demonstration Method:

Compliance with the CO emission limit shall be demonstrated by using only ULSD or natural gas according to **1. Operating Limitations d.**

3. Testing Requirements:

- a. If ULSD fuel is combusted in the boiler, the permittee shall conduct a performance test using U.S. EPA Reference Method 9 of Appendix A-4 of 40 CFR Part 60 and the procedures in 40 CFR 60.11 to demonstrate compliance with the applicable limit in 40 CFR 60.43c, and shall comply with either 40 CFR 60.47c(a)(1), (2), or (3). The observation period for U.S. EPA Reference Method 9 of Appendix A-4 or 40 CFR Part 60 performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation [40 CFR 60.47c(a)].
 - i. Except as provided in 40 CFR 60.47c(a)(2) and (a)(3), the permittee shall conduct subsequent U.S. EPA Reference Method 9 of Appendix A-4 of 40 CFR Part 60 performance tests using the procedures in 40 CFR 60.47c(a) according to the applicable schedule in 40 CFR 60.47c(a)(1)(i) through (a)(1)(iv), as determined by the most recent U.S. EPA Reference Method 9 of Appendix A-4 of 40 CFR Part 60 performance test results. [40 CFR 60.47c(a)(1)]
 - (1) If no visible emissions are observed, a subsequent U.S. EPA Reference Method 9 of Appendix A-4 of 40 CFR Part 60 performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; [40 CFR 60.47c(a)(1)(i)]
 - (2) If visible emissions are observed, but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent U.S. EPA Reference Method 9 of Appendix A-4 of 40 CFR Part 60 performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; [40 CFR 60.47c(a)(1)(ii)]
 - (3) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent U.S. EPA Reference Method 9 of Appendix A-4 of 40 CFR Part 60 performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; or [40 CFR 60.47c(a)(1)(iii)]
 - (4) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent U.S. EPA Reference Method 9 of Appendix A-4 of 40 CFR Part 60 test must be completed within 45 calendar days from the date that the most recent performance test was conducted. [40 CFR 60.47c(a)(1)(iv)]
 - ii. If the maximum 6-minute opacity is less than 10 percent during the most recent U.S. EPA Reference Method 9 of Appendix A-4 of 40 CFR Part 60 performance test, the permittee may, as an alternative to performing subsequent U.S. EPA Reference Method 9 of Appendix A-4 of 40 CFR Part 60 performance tests, elect to perform subsequent monitoring using U.S. EPA Reference Method 22 of Appendix A-7 of 40 CFR Part 60

according to the procedures specified in 40 CFR 60.47c(a)(2)(i) and (ii). [40 CFR 60.47c(a)(2)]

- (1) The permittee shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using U.S. EPA Reference Method 22 of Appendix A-7 of 40 CFR Part 60 and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (i.e., 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (i.e., 90 seconds per 30 minute period), the permittee shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observations (i.e. 90 seconds) or conduct a new U.S. EPA Reference Method 9 of Appendix A-4 of 40 CFR Part 60 performance test using the procedures in 40 CFR 60.47c(a) within 45 calendar days according to the requirements in 40 CFR 60.45c(a)(8). [40 CFR 60.47c(a)(2)(i)]
 - (2) If no visible emission are observed for 10 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed. [40 CFR 60.47c(a)(2)(ii)]
 - iii. If the maximum 6-minute opacity is less than 10 percent during the most recent U.S. EPA Reference Method 9 of Appendix A-4 of 40 CFR Part 60 performance test, the permittee may, as an alternative to performing subsequent U.S. EPA Reference Method 9 of Appendix A-4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in 40 CFR 60.47c(a)(2). For reference purposes in preparing the monitoring plan, see OAQPS “Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems.” This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods. [40 CFR 60.47c(a)(3)]
- b. Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 4]

4. Specific Monitoring Requirements:

The permittee shall monitor the quantity of fuel consumed, in MMBtu/month, for the days the boiler was operating. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain fuel use records, in MMBtu/month, for the days the boiler was operating, and calculate a twelve (12)-month rolling total of the annual capacity factor [401 KAR 52:020, Section 10 and 40 CFR 63.7525(k)]. The permittee shall calculate the

annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a twelve (12)-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month. [40 CFR 60.48c(h)]

- b. ULSD vendor certification shall include all the requirements according to 40 CFR 60.48c(f).
- c. Records shall be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1) [40 CFR 63.7560(a)]. As specified in 40 CFR 63.10(b)(1), the permittee shall keep each record for five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record [40 CFR 63.7560(b)]. The permittee shall keep each record on site, or they shall be accessible from on site (for example, through a computer network), for at least two (2) years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining three (3) years [40 CFR 63.7560(c)].
- d. The permittee shall meet the requirements of 40 CFR 63.7555.

6. Specific Reporting Requirements:

- a. The permittee shall meet the requirements of 40 CFR 60.48c.
- b. The permittee shall meet the requirements of 40 CFR 63.7545, and 63.7550.

7. Specific Control Equipment Operating Conditions:

- a. The permittee shall operate the unit in accordance with manufacturer's specifications and standard operating practices [401 KAR 50:055, Section 2].
- b. See **Section E - Source Control Equipment Requirements.**

Emission Units 25-30 – Six (6) Combustion Turbines (TC5 – TC10)

Description:

General Electric 7FA natural gas-fired simple cycle combustion turbines

Nominal Rated Output Capacity: 160 MW, each

Rated Heat Input Capacity: 1,763 MMBtu/hr (at minus 10 degrees F), each

Construction Commenced: 2001

Controls: dry low NO_x burners

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

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

401 KAR 60:005, Section 2(2)(pp) 40 C.F.R. 60.330 through 60.335 (**Subpart GG**), *Standards of Performance for Stationary Gas Turbines*

401 KAR 60:005, Section 2(1), 40 C.F.R. 60.1 through 60.19, Table 1 (**Subpart A**), *General Provisions*

401 KAR 63:002, Section 2(4)(dddd), 40 C.F.R. 63.6080 through 63.6175, Tables 1 through 7 (**Subpart YYYY**), *National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines*. This regulation applies, but these are existing units [40 CFR 63.6090(a)(1)] and they do not have to meet the requirements of this regulation [40 CFR 63.6090(b)(4)].

40 CFR Parts 72 to 78, *Federal acid rain provisions* (See **Section J**)

40 CFR 97, Subpart AAAAA, *CSAPR NO_x Annual Trading Program* (See **Section L**)

40 CFR 97, Subpart CCCCC, *CSAPR SO₂ Group 1 Trading Program* (See **Section L**)

40 CFR 97, Subpart GGGGG, *CSAPR NO_x Ozone Season Group 3 Trading Program* (See **Section L**)

1. Operating Limitations:

- a. Startup and shutdown periods shall be limited to no more than two (2) hours for each startup/shutdown event [401 KAR 52:020, Section 10].
- b. The permittee shall use only natural gas in the turbines [401 KAR 52:020, Section 10].
- c. The fuel sulfur content shall not exceed 2.0 grains/100 SCF [401 KAR 51:017].

Compliance Demonstration Method:

Compliance shall be demonstrated by **4. Specific Monitoring Requirements c.**

2. Emission Limitations:

- a. NO_x levels in the exhaust gas shall not exceed an hourly average of 12 ppm by volume at 15 percent oxygen on a dry basis, and an annual (twelve (12)-month rolling) average of 9 ppm by volume at 15 percent oxygen on a dry basis, except during periods of startup, shutdown, or malfunction [401 KAR 51:017]. Compliance with this limit constitutes compliance with the NO_x limit contained in 40 CFR 60, Subpart GG.

Compliance Demonstration Method:

Compliance with the NO_x limit shall be demonstrated by CEMS according to 4. **Specific Monitoring Requirements a.**

- b. Except during periods of startup, shutdown, or malfunction, the CO emission level in the exhaust gas shall not exceed 9 ppm by volume at 15 % oxygen, on a dry basis, during any three (3)-hour averaging period [401 KAR 51:017].

Compliance Demonstration Method:

Compliance with this limit shall be demonstrated by CEMS according to 4. **Specific Monitoring Requirements d.**

- c. Filterable PM shall not exceed 19 lb/hr from each turbine [401 KAR 51:017].

Compliance Demonstration Method:

Compliance with the PSD PM limit was demonstrated by testing performed on April 11-12 and 16-17, 2002.

- d. Formaldehyde emissions from Emission Units 25 – 30 shall not exceed 10 tons during any consecutive twelve (12)-month period [401 KAR 63:020].

Compliance Demonstration Method:

To demonstrate compliance, the permittee shall calculate and maintain a twelve (12)-month rolling total of the following equation:

$$F = \frac{NG \times EF}{2,000 \frac{lbs}{ton}}$$

where,

F = Formaldehyde emissions, ton/month

NG = natural gas combusted in Emission Units 25-30, MMscf/month

EF = emission factor, lb/MMscf. Use 0.72 lb/MMscf, from AP-42.3.1-3, or the emission factor determined by a representative performance test conducted, according to the requirements of 401 KAR 50:045, within the last five (5) years.

- e. See **Section D - Source Emission Limitations and Testing Requirements.**

3. Testing Requirements:

- a. In conducting performance tests required by 40 CFR 60.8, the permittee shall use as test methods and procedures the test methods in Appendix A of 40 CFR Part 60 or other methods or procedures as specified in 40 CFR 60.335, except as provided for in 40 CFR 60.8(b) [40 CFR 60.335(b)]. Testing of a single General Electric 7FA combustion turbine may be used to represent all identical GE 7FA units [401 KAR 52:020, Section 10].

b. Test Summary Table:

| Emission | Test Method | Frequency |
|--------------|--|---------------|
| Formaldehyde | Method 323 or other acceptable test method(s) approved by the Division | Every 5 Years |

c. Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

- a. The permittee shall install, calibrate, maintain, and operate the NO_x CEMS. The NO_x CEMS shall be used as the indicator of continuous compliance with the NO_x emission standard. Excluding the startup and shut down periods, if any (1) one-hour average exceeds the NO_x emission limitation, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and complete necessary control device/process/CEMS repairs or take corrective action as soon as practicable [401 KAR 52:020, Section 10, and 40 CFR 75.10(a)(2)].
- b. The permittee shall monitor the quantity of natural gas combusted, in MMscf, in each combustion turbine on a daily basis [401 KAR 52:020, Section 10].
- c. The permittee shall monitor the sulfur content of the natural gas fuel being fired in the turbines annually (once per calendar year). The permittee may use a current, valid purchase contract, tariff sheet or transportation contract, specifying that the gas contains 2.0 grains/100 SCF of sulfur or less as proof of natural gas quality, according to 40 CFR 60.334(h)(3). [401 KAR 51:017]
- d. To meet the monitoring requirement for CO, the permittee shall use a CEMS. Excluding the startup and shut down periods, if any (3) three-hour average CO value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and complete necessary process or CEMS repairs or take corrective action as soon as practicable. [401 KAR 52:020, Section 10]
- e. The permittee shall perform and report Quality Assurance (QA) procedures for CO and NO_x CEMS specified in Appendix F of 40 CFR 60, according to the schedule for Quality Assurance procedures specified in Appendix B of 40 CFR 75.
- f. The permittee shall install, calibrate, operate, test, and monitor all continuous monitoring systems and monitoring devices in accordance with 40 CFR 60.13 or 40 CFR 75.10.
- g. The permittee shall monitor the hours of operation of each combustion turbine on a daily basis. [401 KAR 52:020, Section 10]
- h. The permittee shall monitor the power output, in MW, of each combustion turbine on a daily basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain a file of all measurements, including CEMS, monitoring device, and performance testing measurements; all CEMS performance evaluations; all CEMS or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by 40 CFR 60, Subpart A recorded in a permanent form suitable for inspection [40 CFR 60.7(f)].
- b. Records, including those documenting the results of each compliance test and all other records and reports required by this permit, shall be maintained for five (5) years [401 KAR 52:020, Section 10].
- c. The permittee shall maintain records of all sulfur content measurements as required in **4. Specific Monitoring Requirements** c. or maintain a copy of a current, valid purchase contract, tariff sheet or transportation contract. [401 KAR 52:020, Section 10]
- d. The permittee shall maintain daily records of the natural gas, in millions of cubic feet, fired in each combustion turbine, for any consecutive twelve (12) month period [401 KAR 52:020, Section 10].
- e. The permittee shall maintain daily records of all hours of operation for each combustion turbine, for any consecutive twelve (12) month period [401 KAR 52:020, Section 10].
- f. The permittee shall maintain daily records of all power output, in MW, for each combustion turbine, for any consecutive twelve (12) month period [401 KAR 52:020, Section 10].

6. Specific Reporting Requirements:

- a. Minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. The permittee shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be submitted electronically or postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:
 - i. The magnitude of the excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
 - ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the emissions unit. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.
 - iii. The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - iv. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report. [40 CFR 60.7(c)].
- b. Excess emissions of NO_x are defined as any (1) one-hour period during which the average emissions (arithmetic average) exceed the applicable NO_x emission standard. These periods of excess emissions shall be reported quarterly. The NO_x CEMS reports will be

used in lieu of the water to fuel ratio requirements of 40 CFR 60.334(c) [401 KAR 52:020, Section 10].

- c. Excess emissions of CO are defined as any (3) three-hour period during which the average emissions (arithmetic average) exceed the applicable CO emission standard. These periods of excess emissions shall be reported quarterly [401 KAR 52:020, Section 10].

7. Specific Control Equipment Operating Conditions:

- a. The Dry Low-NO_x Burners shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and standard operating practices [401 KAR 50:055, Section 2].
- b. See **Section E - Source Control Equipment Requirements** for additional requirements.

Emission Unit 18 - Emergency Generator Engine

Description:

Rated Capacity: 150 kW (227 HP)
Fuel: 16.1 gal/hr ULSD
Construction commenced: 1994

Emission Unit 53 - Emergency Fire Pump Engine

Description:

Rated capacity: 380 HP
Fuel: 19.1 gal/hr, ULSD
Construction commenced: 1982

APPLICABLE REGULATION:

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

1. Operating Limitations:

- a. If the engines operate for the purposes specified in 40 CFR 63.6640(f)(4)(ii), the permittee shall use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted [40 CFR 63.6604(b)].
- b. The permittee shall be in compliance with the applicable emission limitations, operating limitations, and other requirements in 40 CFR 63, Subpart ZZZZ at all times. [40 CFR 63.6605(a)]
- c. At all times the permittee shall operate and maintain the engine, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source [40 CFR 63.6605(b)].
- d. The permittee shall operate and maintain the engine and any after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop the permittee's own maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e)(2)]

Compliance Demonstration Method:

The permittee shall maintain records of the maintenance conducted on each engine. See **5. Specific Recordkeeping Requirements b.**

- e. The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed thirty (30) minutes. [40 CFR 63.6625(h)]
- f. The permittee shall operate the emergency engines according to the requirements in 40 CFR 63.6640(f)(1) through (4). In order for the engines to be considered emergency stationary RICE under 40 CFR 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year per engine, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. The engines will not be considered emergency engines under 40 CFR 63, Subpart ZZZZ and shall meet all requirements for non-emergency engines if the engines do not operate according to the following requirements: [40 CFR 63.6640(f)]
 - i. There is no time limit on the use of emergency engines in emergency situations. [40 CFR 63.6640(f)(1)]
 - ii. The permittee may operate the emergency engines for maintenance checks and readiness testing for a maximum of 100 hours per calendar year per engine. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) counts as part of the 100 hours per calendar year allowed. [40 CFR 63.6640(f)(2) and (f)(2)(i)]
 - iii. The engines may be operated for up to 50 hours per calendar year per engine 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. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)(3)]

Compliance Demonstration Method:

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

- g. For each engine, the permittee shall comply with the following requirements:
 - i. Change the oil and filter every five hundred (500) hours of operation or annually, whichever comes first. The permittee has the option of utilizing an oil analysis program as specified in 40 CFR 63.6625(i) in order to extend the oil change requirement.
 - ii. Inspect the air cleaner every one thousand (1,000) hours of operation or annually, whichever comes first, and replace as necessary.
 - iii. Inspect all hoses and belts every five hundred (500) hours of operation or annually, whichever comes first, and replace as necessary.[40 CFR 63.6602 referencing Table 2c, Item 1.]

Compliance Demonstration Method:

The permittee shall maintain records of the maintenance conducted on each engine. See **5. Specific Recordkeeping Requirements b.**

2. **Emission Limitations:**

N/A

3. **Testing Requirements:**

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1]

4. **Specific Monitoring Requirements:**

- a. The permittee shall monitor the fuel usage rate, in gallons, on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

5. **Specific Recordkeeping Requirements:**

- a. The permittee shall maintain records of the fuel usage rate, in gallons, on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain all records required by 40 CFR 63.6655, including notifications, records of required maintenance, records of actions during malfunction, and records of hours of operation. [40 CFR 63, Subpart ZZZZ]
- c. The permittee shall maintain records of the hours of operation of each engine that is recorded through the non-resettable hour meters. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR 63.6640(f)(2)(ii) or (iii), the permittee shall maintain records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 CFR 63.6655(f)(1)]
- d. The permittee shall keep each record in hard copy or electronic form for five (5) years following the date of each occurrence, measurement, maintenance, corrective action or record. The records shall be in a form suitable and readily available for expeditious review. [40 CFR 63.10(b)(1) and 40 CFR 63.6660]

6. **Specific Reporting Requirements:**

- a. The permittee shall submit any notifications required by 40 CFR 63.6645 and 63.6650. [40 CFR 63, Subpart ZZZZ]
- b. If the engine operates or is contractually obligated to be available for more than fifteen (15) hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), the permittee shall submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3). [40 CFR 63.6650(h)]
- c. See Section F., **Monitoring, Recordkeeping, and Reporting Requirements.**

Emission Unit 33 - Emergency Generator Engine

| | |
|-------------------------|--------------------------------------|
| Description: | Tier 2 certified, 4-Stroke Lean Burn |
| Rated capacity: | 2206 HP |
| Fuel: | 104.8 gal/hr ULSD |
| Construction commenced: | 2007 |
| Controls: | NSCR |

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

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

401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (Subpart ZZZZ), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*. This regulation is applicable to this engine, but it does not have to meet the requirements of this regulation or of 40 CFR 63, Subpart A, except for the initial notification requirements of 40 CFR 63.6645(f), as long as the permittee complies with **1. Operating Limitations b.** [40 CFR 63.6590(b)(1)(i)].

1. Operating Limitations:

- a. The engine, except for testing purposes, shall only operate during periods when Unit 31 is operating at less than 50 percent load. [401 KAR 51:017]

Compliance Demonstration Method:

Compliance is demonstrated by **5. Specific Recordkeeping Requirements b.** and **6. Specific Reporting Requirements a.** and **b.**

- b. Any operation other than emergency operation, maintenance and testing, 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 following requirements, the engine will not be considered an emergency engine under 40 CFR 60, Subpart III 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 engines in emergency situations. [40 CFR 60.4211(f)(1)]
 - ii. The permittee may operate the engine for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, 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. [40 CFR 60.4211(f)(2) and (f)(2)(i)]
 - iii. The engine 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. Except as provided in 40 CFR 63.4211(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)]

Compliance Demonstration Method:

Compliance is demonstrated by **4. Specific Monitoring Requirements a.**, **5. Specific Recordkeeping Requirements b.**, and **6. Specific Reporting Requirements a. and b.**

- 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 obtained prior to October 10, 2010 may be used until depleted .[40 CFR 60.4207(b)]

Compliance Demonstration Method:

Compliance is demonstrated by **4. Specific Monitoring Requirements b.** and **6. Specific Reporting Requirements b.**

2. Emission Limitations:

Over the entire life of the engine, the permittee shall meet the following emission standards for all pollutants and the smoke standards as specified in 40 CFR 1039.105: [40 CFR 60.4205(b) referencing 40 CFR 60.4202(a)(2) referencing Table 2 of 40 CFR part 1039, Appendix I and 40 CFR 60.4206]

| Pollutant | Emission Standard (g/kW-hr) |
|------------------------|-----------------------------|
| NMHC + NO _x | 6.4 |
| CO | 3.5 |
| PM | 0.20 |

Compliance Demonstration Method:

The permittee shall have purchased the engine as certified by the manufacturer. The engine shall be installed and configured according to the manufacturer's emission-related specifications. [40 CFR 63.4211(c)]

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

- a. If the engine does not meet the standards applicable to non-emergency engines, the permittee shall install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]
- b. The permittee shall monitor the fuel usage rate, in gallons, on a monthly basis. The permittee shall maintain supplier's certifications of fuel sulfur content. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the fuel usage rate, in gallons, on a monthly basis. [401 KAR 52:020, Section 10]
- b. 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)]

6. Specific Reporting Requirements:

- a. The permittee shall report records of fuel usage rate, hours of operation and purpose. [401 KAR 52:020, Section 10]
- b. The permittee shall report any violation of **1. Operating Limitations** a., b., and c. [401 KAR 52:020, Section 10].
- c. See **Section F - Monitoring, Recordkeeping, and Reporting Requirements.**

7. Specific Control Equipment Operating Conditions:

See **Section E – Source Control Equipment Requirements.**

Emission Units 50 – 52 - Three Emergency Generator Engines

Description: Tier 2 certified, 4-stroke lean burn
Rated capacity: 1220 HP, each
Fuel: 51.3 gal/hr each, ULSD
Construction Commenced: December 2014

Emission Unit 55 - 56 – Two Emergency Black Start Diesel Engines

Description: Tier 2 certified, 4 stroke lean burn
Nameplate Capacity: 5051 HP, each (or 3500kWe, each)
Installed: March 2017

Emission Unit 60 - Emergency Generator Engine

Description: Tier 3 certified, 4-stroke lean burn
Rated capacity: 463 HP (300 kW)
Fuel: 63.4 gal/hr ULSD
Construction Commenced: August 2021

APPLICABLE REGULATIONS:

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

401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (**Subpart ZZZZ**), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*. The regulation is applicable to these engines, but they do not have to meet the requirements of this regulation as long as the permittee complies with **1. Operating Limitations a. and b.**

1. Operating Limitations:

- a. For EUs 50-52 and 55-56, the engines do not have to meet the requirements of 40 CFR 63, Subpart ZZZZ and of 40 CFR 63, Subpart A, except for the initial notification requirements of 40 CFR 63.6645(f), if the engines do not operate or are not contractually obligated to be available for more than fifteen (15) hours per calendar year for the demand response purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii). [40 CFR 63.6590(b)(1)(i)]
- b. For EU 60, the permittee shall meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart III. No further requirements apply to this engine under 40 CFR 63, Subpart ZZZZ. [40 CFR 63.6590(c)(6)]
- 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 obtained prior to October 10, 2010 may be used until depleted. [40 CFR 60.4207(b)]

Compliance Demonstration Method:

Compliance with the fuel standard shall be demonstrated according to **5. Specific Recordkeeping Requirements b.**

- d. Except as permitted under 40 CFR 60.4211(g)(3), the permittee shall: [40 CFR 60.4211(a)]
 - i. Operate and maintain the stationary CI internal combustion engines and control devices 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)]
 - iii. Meet the requirements of 40 CFR part 1068, as applicable. [40 CFR 60.4211(a)(3)]

Compliance Demonstration Method:

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

c. See also **3. Testing Requirements** b. and **5. Specific Recordkeeping Requirements** d.

- e. In order for the engines to be considered emergency stationary internal combustion engines under 40 CFR 60, Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited. If the permittee does not operate the engines according to the requirements below, the engines will not be considered emergency engines and must 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. Emergency stationary ICE may be operated for maintenance checks and readiness testing for a maximum of 100 hours per calendar year per engine, 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 permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [40 CFR 4211(f)(2) and (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. 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)]

Compliance Demonstration Method

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

2. Emissions Limitations

- a. Over the entire life of the engines, the permittee shall meet the following emission standards: [40 CFR 60.4205(b) referencing 40 CFR 60.4202(a)(2) referencing Table 2 of 40 CFR part 1039, Appendix I and 40 CFR 60.4206]

| Pollutant | Emission Units | Emission Standard (g/kW-hr) |
|-----------------|--------------------|--------------------------------|
| NMHC + | 50-52 & 55-56 | 6.4 |
| NO _x | 60 | 4.0 |
| CO | 50-52, 55-56, & 60 | 3.5 |
| PM | 50-52, 55-56, & 60 | 0.20 |

- b. Over the entire life of the engines, smoke from the engines shall not exceed the smoke standards as specified in 40 CFR 1039.105. [40 CFR 60.4205(b) referencing 40 CFR 60.4202(a)(2) and 40 CFR 60.4206]

Compliance Demonstration Method:

The permittee shall comply by purchasing engines certified to the emission standards described herein. The engines shall be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g)(3) (See **3. Testing Requirements b.** and **5. Specific Recordkeeping Requirements e.**). [40 CFR 60.4211(c)] See also **1. Operating Limitations c.**

3. Testing Requirements:

- a. Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]
- b. If the engine or control device is not operated and maintained according to the manufacturer's written emission-related instructions, the permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards 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)].
- c. The permittee shall meet the NTE standards as indicated in 40 CFR 60.4212 when performance tests are conducted in-use. [40 CFR 60.4205(e)]

4. Specific Monitoring Requirements:

- a. The permittee shall install a non-resettable hour meter prior to startup of each engine. [40 CFR 60.4209(a)]
- b. The permittee shall monitor the amount of fuel combusted, in gallons, on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the operation of each engine in emergency and non-emergency service that are recorded through the non-resettable hour meters. 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 the amount of fuel combusted, in gallons, on a monthly basis. The permittee shall maintain supplier's certifications of fuel sulfur content. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain records of the manufacturer's certified emissions certificate, manufacturer's written operating instructions, and any procedures developed by the permittee that are approved by the engine manufacturer, over the entire life of the engine. [401 KAR 52:020, Section 10]
- d. If the engine or control device is not operated and maintained according to the manufacturer's written emission-related instructions, the permittee shall maintain a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engines in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 60.4211(g)(3)]

6. Specific Reporting Requirements:

- a. The permittee shall report the amount of fuel combusted, in gallons, and the hours of operation of each engine in its semi-annual report. [401 KAR 52:020, Section 10]
- b. If the engines operate or are contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 60.4211(f)(2)(ii) and (iii) or that operates for purposes specified in 40 CFR 60.4211(f)(3)(i), the permittee shall submit an annual report according to the requirements in 40 CFR 60.4214(d)(1) through (3). [40 CFR 60.4214(d)]
- c. See **Section F - Monitoring, Recordkeeping and Reporting Requirements** for additional requirements.

Emission Units 05, 06, 34, 35 - Fossil Fuel Storage Operations & Plant Roadways

Description:

| EU | Description | Controls | Construction Commenced |
|----|--|-------------------------------|------------------------|
| 05 | Fossil fuel storage pile encompasses area north of E1 conveyor | N/A | Before 1990 |
| 06 | Paved plant roadways for truck delivery of raw materials | N/A | Before 1990 |
| 34 | Fossil fuel pile “A” encompasses area southwest of E1 conveyor | Compaction, water suppression | 2007 |
| 35 | Fossil fuel pile “B” encompasses area southeast of E1 conveyor | Compaction, water suppression | 2007 |

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

401 KAR 63:010, *Fugitive emissions*

Secretary’s Final Order, DAQ-27602-042, Filed September 28, 2007

1. Operating Limitations:

- a. A person shall not cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished; or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Reasonable precautions shall include, as applicable: [401 KAR 63:010, Section 3(1) and Secretary’s Final Order, DAQ-27602-042, Filed September 28, 2007]
 - i. Use, if possible, of water or suitable chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
 - ii. Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - iii. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations;
 - iv. Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
 - v. Paved roadways shall be maintained in a clean condition by application of water or suitable chemical; and
 - vi. The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or other earth moving equipment or erosion by water.

- b. If dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate

any administrative regulation, the secretary may, based on the cause, type, or amount of a fugitive emission, order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air. [401 KAR 63:010, Section 3(3)]

- c. At all times while in motion, open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered. [401 KAR 63:010, Section 4(1)]
- d. A person shall not cause, suffer, or allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. [401 KAR 63:010, Section 4]
- e. The permittee shall apply compaction and water suppression control methods as BACT for EU 34 and EU 35. [401 KAR 51:017]

2. Emission Limitations:

A person shall not cause, suffer, or allow visible fugitive dust emissions beyond the lot line of the property on which the emissions originate, as determined by U.S. EPA Reference Method 22 (Method 22), for: [401 KAR 63:010, Section 3(2)]

- a. More than five (5) minutes of emission time during any sixty (60) minute observation period; or
- b. More than twenty (20) minutes of emission time during any twenty-four (24) hour period.

Compliance Demonstration Method:

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

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:45, Section 1]

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the reasonable precautions taken to prevent particulate matter from becoming airborne on a daily basis. [401 KAR 52:020, Section 10]
- b. The permittee shall perform a qualitative visual observation of each coal pile area encompassed by the listed Emission Units and of the lot line while trucks are travelling the paved roads on a weekly basis. If fugitive dust emissions beyond the lot line of the property are observed, the permittee shall conduct Method 22 (visual determination of fugitive emissions) observations per Appendix A of 40 CFR part 60. In lieu of conducting Method 22, the permittee shall immediately perform a corrective action which results in no visible fugitive dust emissions beyond the lot line of the property. [401 KAR 52:020, Section 10 and 401 KAR 63:010, Section 3(2)]

- c. The permittee shall monitor the amount of coal received via trucks, in tons, on a monthly basis. [401 KAR 52:020, Section 10]
- d. Emission Unit 06 only -The permittee shall monitor the number of trucks and vehicle miles traveled on paved roads for raw material delivered and received on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the reasonable precautions taken to prevent particulate matter from becoming airborne on a daily basis. Notation of the operating status, down-time, or relevant weather conditions are acceptable for entry to the record. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of the following: [401 KAR 52:020, Section 10]
 - i. Qualitative fugitive emissions observations conducted weekly, including the date, time, initials of observer, and whether any fugitive dust emissions were observed;
 - ii. Any Method 22 performed and field records identified in Reference Method 22.
 - iii. Any corrective action taken and results.
- c. The permittee shall maintain records of the amount of coal received via trucks, in tons, on a monthly basis. [401 KAR 52:020, Section 10]
- d. Emission Unit 06 only - The permittee shall maintain records of the number of trucks and vehicle miles traveled on paved roads for raw material delivered and received on a monthly basis. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

See **Section F - Monitoring, Recordkeeping, and Reporting Requirements.**

7. Specific Control Equipment Operating Conditions:

- a. The dust water suppressant system for the stockpile operations shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and standard operating practices. [401 KAR 50:055, Section 2]
- b. Emission Unit 06 only - Plant roadways shall be paved in asphalt and repaired or repaved and controlled with water or suitable chemical as necessary to comply with 401 KAR 63:010. [Secretary's Final Order, DAQ-27602-042, Filed September 28, 2007]
- c. Records regarding the maintenance and use of the dust water suppressant system for the stockpile operations shall be maintained. [401 KAR 52:020, Section 10]
- d. See **Section E - Source Control Equipment Requirements.**

Emission Units 07, 08, 09, 37, 39 - Fossil Fuel Handling Operations**Description:**

| EU | Source | Description | Transfer Rate | Controls | Construction Commenced |
|-----------|-----------------------------------|--|----------------------|----------------------------|-------------------------------|
| 07-2 | Barge Unloading | One Continuous Barge Unloader | 5,500 ton/hr | Enclosure | 1990 |
| 07-5a | Conveyor Belt A | From Continuous Barge Unloader to Conveyor B | 5,500 ton/hr | Enclosure | 1990 |
| 07-5b | Conveyor Belt B | From Conveyor A to Transfer House/Conveyor C | 5,500 ton/hr | Enclosure /Hood | 1990 |
| 07-5c | Conveyor Belt C | From B Transfer House to Coal Sample House Bin | 5,500 ton/hr | Enclosure /Hood Rotocclone | 1990 |
| 07-7 | Reclaim Hopper & Conveyor Belt R1 | From Inactive Fossil Fuel Pile to Crusher House | 1,320 ton/hr | Enclosure | 1990 |
| 07-8a | Conveyor Belt E1 | From Conveyor D or E3 to Active Storage or Crusher House | 2,640 ton/hr | Hood | 1990 |
| 07-8b | Conveyor Belt F1 | From Crusher House to Conveyor G1 | 1,320 ton/hr | Dust Collector | 1990 |
| 07-8c | Conveyor Belt F2 | From Crusher House to Conveyor G2 | 1,320 ton/hr | Dust Collector | 1990 |
| 07-9a | Conveyor Belt D | From Coal Sample House Bin to Conveyor E1 or S | 3,000 ton/hr | Enclosure | 1990 |
| 07-9b | Conveyor Belt S | From Conveyor D to Inactive Fossil Fuel Pile | 1,650 ton/hr | Enclosure | 1990 |
| 08 | Crusher House | Two Crushers, Fossil Fuel Crusher Bin | 3,600 ton/hr | Rotocclone | 1990 |
| 09 | Six Unit 1 Silos | From Conveyors G1 & G2 to TC1 | 800 ton/hr | Dust Collector | 1990 |
| 37 | Conveyor Belt E2 | From Active Coal Piles "A & B" to Conveyor E3 | 2,640 ton/hr | Dust Collectors A & B | 2008 |
| 39 | Six Unit 2 Silos | From Conveyors G1 & G2 to TC2 | 800 ton/hr | Dust Collector | 2008 |

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

401 KAR 60:005, Section 2(2)(gg), 40 C.F.R. 60.250 through 60.258 (**Subpart Y**), *Standards of Performance for Coal Preparation and Processing Plants*

1. Operating Limitations:

The permittee shall utilize dust collectors as BACT for the reclaim hopper of EU 37 and for EU 39. [401 KAR 51:017]

2. Emission Limitations:

The permittee shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater. [40 CFR 60.254]

Compliance Demonstration Method:

Compliance with the opacity emission limit shall be demonstrated according to **4. Specific Monitoring Requirements b.** and **5. Specific Recordkeeping Requirements b.**

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the amount of coal received and processed, in tons, on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall perform a qualitative visual observation of the emissions from each emission unit on a weekly basis and maintain records of the observations. If visible emissions are observed, the opacity shall be determined using U.S. EPA Reference Method 9 (40 CFR Appendix A). If the opacity reading is greater than 20%, the permittee shall initiate an inspection of the equipment for any repairs or apply control measures, as appropriate. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the amount of coal received and processed, in tons, on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of qualitative visual observations and all compliance tests. The permittee shall record the date, time, initials of observer, whether any emissions were observed, and any U.S. EPA Reference Method 9 readings taken. In case of exceedances, the permittee shall record the reason (if known) and the measures taken to minimize or eliminate exceedances. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

See **Section F - Monitoring, Recordkeeping, and Reporting Requirements.**

7. **Specific Control Equipment Operating Conditions:**

- a. The enclosures/partial enclosures, baghouses, rotoclones, water spray equipment, bin vent filters, conveyor systems, fuel blending operations, fossil fuel storage silos, and stackout chutes shall be maintained and operated in accordance with manufacturer's specifications and standard operating practices to ensure the emission units are in compliance with applicable requirements of 40 CFR 60, Subpart Y. [401 KAR 50:055, Section 2]
- b. Records regarding the maintenance and use/operation of the control equipment shall be maintained. [401 KAR 59:005, Section 3(4)]
- c. See **Section E - Source Control Equipment Requirements.**

Emission Unit 10 - Lime/Limestone Receiving and Storage

Description:

Equipment includes: Receiving Operations: clamshell unloader, clamshell barge unloader bin; Stockpile Stackout Operations (inactive outdoor storage)

Maximum Operating Rate
(Receiving): 1,650 tons/hr
(Stockpile/Stackout): 1,500 tons/hr
Commenced Construction: Before 1990

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

401 KAR 63:010, *Fugitive emissions*

1. Operating Limitations:

- a. A person shall not cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished; or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Reasonable precautions shall include, as applicable: [401 KAR 63:010, Section 3(1)]
 - i. Use, if possible, of water or suitable chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
 - ii. Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts;
 - iii. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations;
 - iv. Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
 - v. The maintenance of paved roadways in a clean condition; or
 - vi. The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water.
- b. If dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may, based on the cause, type, or amount of a fugitive emission, order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air. [401 KAR 63:010, Section 3(3)]

- c. At all times while in motion, open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered. [401 KAR 63:010, Section 4(1)]
- d. A person shall not cause, suffer, or allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. [401 KAR 63:010, Section 4(3)]

2. Emission Limitations:

A person shall not cause, suffer, or allow visible fugitive dust emissions beyond the lot line of the property on which the emissions originate, as determined by Reference Method 22 of Appendix A in 40 C.F.R. Part 60, for: [401 KAR 63:010, Section 3(2)]

- a. More than five (5) minutes of emission time during any sixty (60) minute observation period; or
- b. More than twenty (20) minutes of emission time during any twenty-four (24) hour period.

Compliance Demonstration Method:

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

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the amount of lime and limestone processed, in tons, on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall monitor the reasonable precautions taken to prevent particulate matter from becoming airborne on a daily basis. [401 KAR 52:020, Section 10]
- c. If fugitive dust emissions beyond the lot line of the property are observed, the permittee shall conduct Reference Method 22 (visual determination of fugitive emissions) observations per Appendix A of 40 C.F.R. Part 60. In lieu of conducting U.S. EPA Reference Method 22, the permittee shall immediately perform a corrective action which results in no visible fugitive dust emissions beyond the lot line of the property. [401 KAR 52:020, Section 10 and 401 KAR 63:010, Section 3(2)]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the amount of lime and limestone processed, in tons, on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of the reasonable precautions taken to prevent particulate matter from becoming airborne on a daily basis. Notation of the operating status, down-time, or relevant weather conditions are acceptable for entry to the record. [401 KAR 52:020, Section 10]

- c. The permittee shall maintain records of the following: [401 KAR 52:020, Section 10]
 - i. Qualitative fugitive emission observations conducted, including the date, time, initials of observer, whether any fugitive emissions were observed;
 - ii. Any Reference Method 22 performed and field records identified in Method 22.
 - iii. Any corrective action taken and the results.

6. Specific Reporting Requirements:

See **Section F - Monitoring, Recordkeeping, and Reporting Requirements.**

7. Specific Control Equipment Operating Conditions:

- a. The wet spray low water surfactant and enclosures shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and standard operating practices. [401 KAR 50:055, Section 2]
- b. Records regarding the maintenance and use of the wet spray low water surfactant and enclosures shall be maintained. [401 KAR 52:020, Section 10]
- c. See **Section E - Source Control Equipment Requirements.**

Emission Unit 13 - Lime/Limestone Crushing and Milling Operations

Description:

Equipment: Two Ball Mills
Maximum Operating Rate: 250 tons/hour, total
Commenced Construction: 1989

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

401 KAR 60:005, Section 2(2)(qqq), 40 C.F.R. 60.670 through 60.676, Tables 1 through 3 (**Subpart OOO**), *Standards of Performance for Nonmetallic Mineral Processing Plants*

1. Operating Limitations:

N/A

2. Emission Limitations:

Fugitive emissions from building openings (except for vents as defined in 40 CFR 60.671) shall not exceed 7 percent opacity. [40 CFR 60.672(e)(1)]

Compliance Demonstration Method:

Compliance with the opacity limit shall be demonstrated according to **4. Specific Monitoring Requirements a.**

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

a. The permittee shall perform a qualitative visual observation of the opacity of emissions from each unit no less than once per month while the affected facility is operating. If visible emissions are observed, the permittee shall determine the opacity using U.S. EPA reference Method 9. In lieu of determining the opacity using Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions. [401 KAR 52:020, Section 10]

b. The permittee shall monitor the amount of lime and limestone processed, in tons, on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of the qualitative visual observations made as specified in **4. Specific Monitoring Requirements a.** including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective actions initiated. [401 KAR 52:020, Section 10]

b. The permittee shall maintain records of the amount of lime and limestone processed, in tons, on a monthly basis. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

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

7. Specific Control Equipment Operating Conditions:

- a. The enclosure shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and standard operating practices. [401 KAR 50:055, Section 2]
- b. Records regarding maintenance of the enclosure shall be maintained. [401 KAR 52:020, Section 10]
- c. See Section E - Source Control Equipment Requirements.

Emission Unit 14 - Lime/Limestone Handling and Processing

Description:

| EU | Source | Description | Transfer Rate | Controls | Construction Commenced |
|------|---------------------------------|--|---------------|-----------|------------------------|
| 14-1 | Limestone Conveyors A, B, & C | Unloader to Conveyor A; Conveyor B to Inactive (Outdoor) or Active (Indoor) Piles; From Active Pile or Inactive Reclaim Hopper to Limestone Hopper | 1,500 ton/hr | Enclosure | 1990 |
| 14-2 | C2 Emergency Limestone Conveyor | From Emergency (Outdoor) Pile to C2 Emergency Conveyor | 130 ton/hr | Hoods | 1990 |
| 14-3 | C3 Emergency Limestone Conveyor | From C2 Conveyor to C Conveyor | 130 ton/hr | Hoods | 1990 |
| 14-4 | Limestone Transfer Bin | Conveyor A Transfer to Conveyor B | 1,500 ton/hr | Enclosure | 1990 |
| 14-5 | Limestone Reclaim Hopper | From Inactive Pile to Conveyor Belt C | 130 ton/hr | Enclosure | 1990 |

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

401 KAR 60:005, Section 2(2)(qqq), 40 C.F.R. 60.670 to 60.676, Tables 1 to 3 (**Subpart OOO**), *Standards of Performance for Nonmetallic Mineral Processing Plants*

1. Operating Limitations:

N/A

2. Emission Limitations:

- a. Fugitive emissions from transfer points, conveyor belts, or any other listed emissions unit shall not exceed 10 percent opacity. [40 CFR 60.672(b), referencing Table 3]

Compliance Demonstration Method:

Compliance with opacity limits shall be demonstrated according to **3. Testing Requirements.**

- b. Fugitive emissions from building openings (except for vents as defined in 40 CFR 60.671) shall not exceed 7 percent opacity [40 CFR 60.672(e)(1)].

Compliance Demonstration Method:

Compliance with opacity limits shall be demonstrated according to **3. Testing Requirements.**

3. Testing Requirements:

- a. The permittee shall conduct visual determination of fugitive emissions while all emission units are operating, in accordance with EPA Reference Method 22, on an annual basis. [401 KAR 52:020, Section 10]
- b. Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

The permittee shall monitor the amount of lime and limestone processed, in tons, on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the amount of lime and limestone processed, in tons, on a monthly basis. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements

- a. The permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of observations using Method 22 to demonstrate compliance, according to 40 CFR 60.676.
- b. See **Section F - Monitoring, Recordkeeping, and Reporting Requirements.**

7. Specific Control Equipment Operating Conditions:

- a. The permittee shall inspect the conveyor equipment covers and shields weekly and make repairs as necessary to assure compliance with opacity limits. [401 KAR 52:020, Section 10]
- b. Partial enclosures on the limestone conveyor systems shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and standard operating practices. [401 KAR 50:055, Section 2]
- c. Records regarding maintenance of the enclosure shall be maintained. [401 KAR 52:020, Section 10]
- d. See **Section E - Source Control Equipment Requirements.**

Emission Unit 42 - Fly Ash Storage Silos and Dust Control Devices

Description:

Fly ash from Units 01 and 31 (TC1 and TC2) is sent to fly ash silo bins, then to either dry bulk trailers with tractor, pneumatically conveyed to covered barge, sent to wet mixing tank to be sluiced to fly ash pond or to the CCR landfill

Equipment: 1,200 and 5,000 ton fly ash silos, and a 100 ton surge silo
Operating Rate: 180 tons/hour, whole system
Commenced Construction: 2007

Emission Unit 44 - Powdered Activated Carbon (PAC) Silo & Dust Control Devices

Description:

Storage Silo Containing PAC for Control of Mercury Emissions from EU31 (TC2)

Storage capacity: 150 tons
Maximum Loading Rate: 626 lb/hour
Commenced Construction: 2007

Emission Unit 45 - Sorbent Storage Silos

Description:

Two Dry Sorbent Storage Silos for SO₃ Control and Conditioning of EU31 (TC2) and PJFF Bags

Storage Capacity: 275 tons, each
System Feed Rate: 5,000 lb/hr (fills one at a time)
Controls: Bin Vent Filters
Commenced Construction: 2014

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

401 KAR 59:010, *New process operations*

1. Operating Limitations:

- a. For EU 42, the permittee shall utilize a dust collector on fly ash silo bins and pneumatic conveyances as BACT for the 1,200 ton fly ash silo. [401 KAR 51:017]
- b. The permittee shall utilize a bin vent filter as BACT for EUs 44 and 45. [401 KAR 51:017]

2. Emission Limitations:

- a. No person shall cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]

Compliance Demonstration Method:

Compliance with the opacity limit shall be demonstrated according to **4. Specific Monitoring Requirements** c. and **5. Specific Recordkeeping Requirements** c.

- b. Particulate matter emissions from each emission unit shall not exceed the following: [401 KAR 59:010, Section 3(2)]

| Process Weight Rate, P (tons/hr) | Maximum Allowable Emission Rate, E (lb/hr) |
|-------------------------------------|---|
| $P \leq 0.5$ | $E = 2.34$ |
| $0.5 < P \leq 30$ | $E = 3.59P^{0.62}$ |
| $P > 30$ | $E = 17.31P^{0.16}$ |

Compliance Demonstration Method:

Compliance shall be demonstrated according to **1. Operating Limitations** and **7. Specific Control Equipment Operating Conditions**.

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the amount of fly ash, PAC and sorbent processed, in tons, on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from each emission unit on a weekly basis while the affected facility is operating. If visible emissions are observed, the opacity shall be determined by U.S. EPA Reference Method 9 (40 CFR Appendix A), and if the opacity reading is greater than 20%, the permittee shall immediately initiate an inspection of the equipment for any repairs or apply control measures as appropriate. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the amount of fly ash, PAC and sorbent processed, in tons, on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of the qualitative visual observations made as specified in **4. Specific Monitoring Requirements** c., including the date, time, initials of observer, whether any emissions were observed (yes/no), and any Method 9 readings taken. In case of an exceedance, the permittee shall record the reason (if known) and the measures taken to minimize or eliminate the exceedance. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

- a. The permittee shall notify the Division's Florence Regional Office at least thirty (30) days prior to use of sorbent materials in the Sorbent storage silo other than hydrated lime. [401 KAR 52:020, Section 10]
- b. See **Section F - Monitoring, Recordkeeping, and Reporting Requirements**.

7. Specific Control Equipment Operating Conditions:

- a. The dust collector equipment and bin vent filters shall be maintained and operated in accordance with manufacturer's specifications and standard operating practices to ensure the emission units are in compliance with the applicable requirements of 401 KAR 59:010. [401 KAR 50:055, Section 2]

- b. Records regarding maintenance of the control equipment shall be maintained. [401 KAR 59:005, Section 3(4)]
- c. See Section E - Source Control Equipment Requirements.

Emission Unit 20 - Natural Draft Cooling Tower for EU 31 (TC2)

Description:

Operating Rate: 20.4 million gallons/hour
Controls: Drift Eliminators, 0.0005%
Commenced Construction: September 1990; Modified 2009

Emission Unit 41 - Mechanical Draft Cooling Tower for EU 01 (TC1)

Description:

Linear, mechanical draft cooling tower (12 cells) for EU 01
Operating Rate: 17.7 million gallons/hour
Controls: Drift Eliminators, 0.0005%
Commenced Construction: 2006

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*
401 KAR 59:010, *New process operations*

1. Operating Limitations:

For EU 41, the cooling tower shall utilize 0.0005% drift eliminators. [401 KAR 51:017]

2. Emission Limitations:

a. No person shall cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty percent opacity. [401 KAR 59:010, Section 3(1)(a)]

Compliance Demonstration Method:

Compliance with the opacity limit shall be demonstrated according to **4. Specific Monitoring Requirements** b. and **5. Specific Recordkeeping Requirements** c.

b. Particulate matter emissions shall not exceed the following: [401 KAR 59:010, Section 3(2)]

| Process Weight Rate, P (tons/hr) | Maximum Allowable Emission Rate, E (lb/hr) |
|---|---|
| $P \leq 0.5$ | $E = 2.34$ |
| $0.5 < P \leq 30$ | $E = 3.59P^{0.62}$ |
| $P > 30$ | $E = 17.31P^{0.16}$ |

Compliance Demonstration Method:

Compliance shall be demonstrated according to **7. Specific Control Equipment Operating Conditions.**

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

For each cooling tower, the permittee shall monitor the water circulation rate and total dissolved solids content of the circulating water on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the manufacturer's design of the drift eliminators. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of the water circulation rate and monthly records of the circulating water total dissolved solids content for each cooling tower. [401 KAR 59:005, Section 3(4)]

6. Specific Reporting Requirements:

See **Section F - Monitoring, Recordkeeping, and Reporting Requirements.**

7. Specific Control Equipment Operating Conditions:

- a. The drift eliminators shall be maintained and operated in accordance with manufacturer's specifications and standard operating practices to ensure the emission unit is in compliance with the applicable requirements of 401 KAR 59:010. [401 KAR 50:055, Section 2]
- b. Records regarding maintenance of the drift eliminators shall be maintained. [401 KAR 59:005, Section 3(4)]
- c. See **Section E - Source Control Equipment Requirements.**

Emission Unit 54 – CCR Landfill Operations and Haul Trucks

Description:

Coal Combustion Residuals (CCR) transportation and storage; material transport
Commenced Construction: September 2016
Landfill Commenced Construction: September 2017
Controls: Wet Suppression by Watering, Cleaning and Road Maintenance

APPLICABLE REGULATION:

401 KAR 63:010, *Fugitive emissions*

PRECLUDED REGULATIONS:

401 KAR 60:005, Section 2(2)(zzz), 40 C.F.R. 60.760 through 60.769 (**Subpart XXX**), *Standards of Performance for Municipal Solid Waste Landfills that Commenced Construction, Reconstruction, or Modification After July 17, 2014*

401 KAR 63:002, Section 2(4)(hhh), 40 C.F.R. 63.1930 through 63.1990, Table 1 (**Subpart AAAA**), *National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills*

NON-APPLICABLE REGULATION:

401 KAR 60:005, Section 2(2)(yyy), 40 C.F.R. 60.750 through 60.759 (**Subpart WWW**), *Standards of Performance for Municipal Solid Waste Landfills*

1. Operating Limitations:

- a. In order to preclude the applicability of 40 CFR 60, Subpart XXX and 40 CFR 63, Subpart AAAA, the permittee shall not accept any waste from the public. The CCR landfill shall not receive any material other than CCR materials.
- b. A person shall not cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished; or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Reasonable precautions shall include, as applicable: [401 KAR 63:010, section 3(1)]
 - i. Use, if possible, of water or suitable chemicals for control of dust in the demolition of existing building or structures, construction operations, the grading of roads or the clearing of land;
 - ii. Application and maintenance of asphalt, oil, water or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts;
 - iii. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations;
 - iv. Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
 - v. The maintenance of paved roadways in a clean condition;

- vi. The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water.
- c. If dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may, based on the cause, type, or amount of a fugitive emission, order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air. [401 KAR 63:010, Section 3(3)]
- d. At all times while in motion, open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered. [401 KAR 63:010, Section 4(1)]
- e. A person shall not cause, suffer, or allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. [401 KAR 63:010, Section 4(3)]

2. Emission Limitations:

A person shall not cause, suffer, or allow visible fugitive dust emissions beyond the lot line of the property on which the emissions originate, as determined by Reference Method 22 of Appendix A in 40 C.F.R. Part 60, for: [401 KAR 63:010, Section 3(2)]

- a. More than five (5) minutes of emission time during any sixty (60) minutes observation period; or
- b. More than twenty (20) minutes of emission time during any twenty-four (24) hour period.

Compliance Demonstration Method:

The permittee shall demonstrate compliance with this requirement by good procedures listed in **1. Operating Limitations**, posting a 15 mile per hour sign for each roadway to be enforced as a speed limit, and meeting the requirements of **4. Specific Monitoring Requirements**.

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

- a. The permittee shall monitor actions taken (e.g. water usage for roads, enclosures are in good operating condition) to prevent the discharge of visible fugitive emissions beyond the property line for each unit on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall monitor the reasonable precautions taken to prevent particulate matter from becoming airborne. [401 KAR 52:020, Section 10]

- c. The permittee shall monitor the rate of material hauled (tons, VMT, gallons/hr, etc.) for each unit or vehicle on paved and unpaved roadways on a monthly basis. [401 KAR 52:020, Section 10]
- d. The permittee shall perform qualitative visual observations once per day during operation. If fugitive dust emissions beyond the lot line of the property are observed, the permittee shall conduct a U.S. EPA Reference Method 22 (visual determination of fugitive emissions) observations per Appendix A of 40 CFR part 60. In lieu of conducting a Method 22, the permittee shall immediately perform a corrective action which results in no visible fugitive dust emissions beyond the lot line of the property. [401 KAR 52:020, Section 10].

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the visual observations and actions taken to prevent the discharge of visible fugitive emissions beyond the property line on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of the reasonable precautions taken to prevent particulate matter from becoming airborne on a daily basis. Notation of the operating status, down-time, or relevant weather conditions are acceptable for entry to the record. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain records of the processing rate (tons, VMT, gallons/hr, etc.) for each vehicle or unit for paved and unpaved roadways on a monthly basis. [401 KAR 52:020, Section 10]
- d. The permittee shall maintain records of qualitative fugitive emission observations conducted on a daily basis, when in operation, including the date, time, initials of observer, whether any fugitive dust emissions were observed, any Method 22 readings performed, including field records identified in Reference Method 22, and any corrective actions taken with the results. [401 KAR 52:020, Section 10]
- e. The permittee shall maintain records of the calculations to determine the fugitive emissions from paved and unpaved roads with all data used in calculations. Emission calculations shall be based on the most current AP-42 emission factors for paved and unpaved roadways for that year.

6. Specific Reporting Requirements:

See Section F - **Monitoring, Recordkeeping and Reporting Requirements.**

7. Specific Control Requirements:

- a. The associated air pollution control equipment for the emission unit shall be operated to maintain compliance with permitted emission limitations, consistent with manufacturer's specifications and standard operating practices. [401 KAR 50:055]
- b. Records regarding the maintenance and use of the air pollution control equipment (spray nozzles) shall be maintained. [401 KAR 52:020, Section 10]

Emission Unit 57 - NG Process Heater/Preheater for CT 25 & 26 (LG&E 5 & 6)

Emission Unit 58 - NG Process Heater/Preheater for CT 27 & 28 (LG&E 7 & 8)

Emission Unit 59 - NG Process Heater/Preheater for CT 29 & 30 (LG&E 9 & 10)

Description:

| Emission Unit | Maximum Heat Input (MMBtu/hr) | Fuel | Construction Commenced |
|----------------------|--------------------------------------|-------------|-------------------------------|
| 57 | 8.8 | Natural Gas | 2001 |
| 58 | 8.0 | | 2003 |
| 59 | 8.8 | | 2003 |

APPLICABLE REGULATIONS:

401 KAR 59:015, *New indirect heat exchangers*

401 KAR 63:002, Section 2(4)(iii), 40 C.F.R. 63.7480 through 63.7575, Tables 1 through 13 (**Subpart DDDDD**), *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*

1. Operating Limitations:

- a. During a startup period or shutdown period, the permittee shall meet the work practice standards established in Table 3 to 40 CFR 63, Subpart DDDDD. [401 KAR 59:015, Section 7(2)(a)]

Compliance Demonstration Method:

Compliance shall be demonstrated by conducting a biennial tune-up of each process heater according to **1. Operating Limitations c.**

- b. At all times, the permittee shall operate and maintain the process heaters, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63.7500(a)(3)]

Compliance Demonstration Method:

Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

- c. The permittee shall conduct a tune-up of the process heaters biennially as specified in 40 CFR 63.7540(a)(10)(i) through (vi). Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up. These units are not subject to the emission limits in 40 CFR 63, Subpart DDDDD Tables 1, 2, or 11 through 13 or the operating limits in 40 CFR 63, Subpart DDDDD Table 4. [40 CFR 63.7500(a)(1) referencing Table 3 Item 2., 40 CFR 63.7500(e), 40 CFR 63.7540(a)(11), and 40 CFR 63.7515(d)]
- i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the

- tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment; [40 CFR 63.7540(a)(10)(i)]
- ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available; [40 CFR 63.7540(a)(10)(ii)]
 - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown); [40 CFR 63.7540(a)(10)(iii)]
 - iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the units are subject; [40 CFR 63.7540(a)(10)(iv)]
 - v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and [40 CFR 63.7540(a)(10)(v)]
 - vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in 40 CFR 63.7540(a)(10)(vi)(A) through (C), [40 CFR 63.7540(a)(10)(vi)]
 - (1) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater; [40 CFR 63.7540(a)(10)(vi)(A)]
 - (2) A description of any corrective actions taken as part of the tune-up; and [40 CFR 63.7540(a)(10)(vi)(B)]
 - (3) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. [40 CFR 63.7540(a)(10)(vi)(C)]
 - vii. If the unit is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13)]

Compliance Demonstration Method:

Compliance with the 40 CFR 63, Subpart DDDDD biennial tune-up requirement shall be demonstrated according to **5. Specific Recordkeeping Requirements b.** and **6. Specific Reporting Requirements d.**

2. Emission Limitations:

- a. The indirect heat exchangers shall not cause emissions of particulate matter in excess of 0.10 lb/MMBtu actual heat input. [401 KAR 59:015, Section 4(1)(b)]
- b. Visible emissions from each stack shall not exceed 20 percent opacity except: [401 KAR 59:015, Section 4(2)]
 - i. A maximum of 27 percent opacity shall be permissible for not more than one 6-minute period in any 60 consecutive minutes. [401 KAR 59:015, Section 4(2)(a)]
 - ii. Emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions, provided the method used is that

recommended by the manufacturer and the time does not exceed the manufacturer's recommendations. [401 KAR 59:015, Section 4(2)(b)]

- c. The indirect heat exchangers shall not cause emissions of gases that contain sulfur dioxide in excess of 0.8 lb/MMBtu actual heat input. [401 KAR 59:015, Section 5(1)(b)1.]

Compliance Demonstration Method:

These units are assumed to be in compliance with the applicable 401 KAR 59:015 particulate matter, sulfur dioxide, and opacity standards while combusting natural gas.

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

The permittee shall monitor fuel usage, in MMscf, for each unit on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of fuel usage, in MMscf, for each unit on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain a copy of each notification and report that was submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that was submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]

6. Specific Reporting Requirements:

- a. The permittee shall include with the Notification of Compliance Status a signed certification that either the energy assessment was completed according to Table 3 to 40 CFR 63, Subpart DDDDD, and that the assessment is an accurate depiction of the facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended. [40 CFR 63.7530(e)]
- b. The permittee shall submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply by the dates specified. [40 CFR 63.7545(a)]
- c. If the permittee intends to use a fuel other than natural gas during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, the permittee shall submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption. The notification shall include the information specified in 40 CFR 63.7545(f)(1) through (5). [40 CFR 63.7545(f)]
- d. The permittee shall submit a biennial compliance report as follows: [40 CFR 63.7550(a) referencing Table 9 Item 1. and 40 CFR 63.7550(b)]

- i. Each biennial compliance report shall cover the applicable 2-year period from January 1 to December 31. [40 CFR 63.7550(b)(3)]
 - ii. Biennial reports shall be postmarked or submitted no later than January 31. [40 CFR 63.7550(b)(4)]
 - iii. The compliance report shall contain the following information: [40 CFR 63.7550(c)(1)]
 - (1) Company and Facility name and address; [40 CFR 63.7550(c)(5)(i)]
 - (2) Process unit information, emission limitations, and operating parameter limitations; [40 CFR 63.7550(c)(5)(ii)]
 - (3) Date of report and beginning and ending dates of the reporting period; [40 CFR 63.7550(c)(5)(iii)]
 - (4) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct a biennial tune-up according to 40 CFR 63.7540(a)(11). Include the date of the most recent burner inspection if it was not done biennially and was delayed until the next scheduled or unscheduled unit shutdown; [40 CFR 63.7550(c)(5)(xiv)]
 - (5) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report; [40 CFR 63.7550(c)(5)(xvii)]
 - iv. If there are no deviations from any emission limitation (emission limit and operating limit) that applies to the permit and there are no deviations from the requirements for work practice standards for periods of startup and shutdown in 40 CFR 63, Subpart DDDDD Table 3 that apply, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period; and
 - v. If you have a deviation from a work practice standard for periods of startup and shutdown, during the reporting period, the report shall contain the information in 40 CFR 63.7550(d)(1) through (3).
- e. See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for additional reporting requirements.

Emission Unit 61 – Parts Washer

Description:

Safety-Kleen Premium Solvent (Virgin and Recycled) SDS ID 82658
Composition: Petroleum distillates, hydrotreated light CAS 64742-47-8
Maximum Vapor Pressure @ 68°F: <1 mmHg
Construction Date: After 1992

APPLICABLE REGULATION:

401 KAR 59:185, *New solvent metal cleaning equipment*

1. Operating Limitations:

- a. The permittee shall observe the operating requirements at all times. [401 KAR 59:185, Section 3]
- b. Waste solvent shall not be disposed of or transferred to another party so that greater than 20% by weight of the waste solvent can evaporate into the atmosphere. Waste solvent shall be stored only in covered containers. [401 KAR 59:185, Section 4(2)(a)]
- c. The degreaser cover shall be closed if not handling parts in the cleaner. [401 KAR 59:185, Section 4(2)(b)]
- d. Cleaned parts shall be drained for a minimum of 15 seconds, or until dripping ceases, whichever is longer. [401 KAR 59:185, Section 4(2)(c)]
- e. The flushing of parts with a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaner. The solvent flow shall be directed downward to avoid turbulence at the air-solvent interface so as to prevent the solvent from splashing outside of the cold cleaner. [401 KAR 59:185, Section 4(2)(d)]
- f. Work area fans shall be positioned so that air is not directed across the opening of the cold cleaner. [401 KAR 59:185, Section 4(2)(e)]
- g. The use of an air-agitated solvent bath is prohibited. A pump-agitated solvent bath shall be operated so as to produce no observable splashing of the solvent against either the tank wall or the parts that are being cleaned. [401 KAR 59:185, Section 4(2)(f)]
- h. The cold cleaner shall be free of all liquid leaks. Auxiliary cleaning equipment such as pumps, water separators, steam traps, or distillation units shall not have any visible leaks, tears, or cracks. [401 KAR 59:185, Section 4(2)(g)]
- i. Spills that occur during solvent transfer shall be cleaned immediately. Wipe rags, or other absorbent equipment and materials, used to clean the spill shall be stored in a covered container for disposal unless storage of these items is prohibited by fire protection authorities. [401 KAR 59:185, Section 4(2)(h)]

2. Emission Limitations:

N/A

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

The permittee shall monitor the amount of solvent used, in gallons, on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the amount of solvent used, in gallons, on a monthly basis. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for general reporting requirements.

7. Specific Control Equipment Operating Conditions:

- a. The permittee shall install, maintain and operate the control equipment as described in 401 KAR 59:185, Section 4(1). [401 KAR 59:185, Section 3]
- b. The cleaner shall be equipped with a cover. If the solvent volatility is greater than 15 mmHg measured at 100°F or if the solvent is agitated or heated, then the cover shall be designed so that it can be easily operated with one hand. [401 KAR 59:185, Section 4(1)(a)]
- c. The cleaner shall be equipped with a drainage facility so that the solvent that drains off parts removed from the cleaner will return to the cleaner. [401 KAR 59:185, Section 4(1)(b)]
- d. A permanent, conspicuous label, summarizing the operating requirements specified in 401 KAR 59:185, Section 4(2) shall be installed on or near the cleaner. [401 KAR 59:185, Section 4(1)(c)]
- e. If used, the solvent spray shall be a fluid stream, not a fine, atomized or shower type spray, and at a pressure that does not cause excessive splashing. [401 KAR 59:185, Section 4(1)(d)]
- f. If the solvent is heated above 120°F, then one of the following control devices shall be used: [401 KAR 59:185, Section 4(1)(e)]
 - i. Freeboard height that gives a freeboard ratio greater than or equal to 0.7; or [401 KAR 59:185, Section 4(1)(e)1.]
 - ii. Other systems of equivalent control, such as a refrigerated chiller or carbon adsorption. [401 KAR 59:185, Section 4(1)(e)3.]
- g. See **Section E - Source Control Equipment Requirements**, for further requirements.

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.

| <u>Description</u> | <u>Generally Applicable Regulation</u> |
|---|--|
| 1. Two station #2 fuel oil tanks, each 100,000 gallons (401 KAR 59:050). General recordkeeping requirements - 40 CFR 60.116b(a) and (b) | 401 KAR 59:050 40 CFR 60.116 b(a) and (b) |
| 2. Parts Washer (Non-VOC Solvent) | N/A |
| 3. 3,000 gallon unleaded gasoline storage tank | 401 KAR 59:050 |
| 4. 3,000 gallon diesel storage tank | N/A |
| 5. 1,100 gallon used oil storage tank | N/A |
| 6. 1,100 gallon #1 fuel oil tank | N/A |
| 7. Wet fly ash collection system | 401 KAR 59:010 |
| 8. Infrequent evaporation of boiler cleaning solutions | N/A |
| 9. Infrequent burning of De Minimis quantities of used oil for energy recovery | N/A |
| 10. Paved and Unpaved Roads | 401 KAR 63:010 |
| 11. Gypsum Storage Piles | 401 KAR 63:010 |
| 12. Coal (inactive outdoor) and Limestone Storage Piles (active indoor) | 401 KAR 63:010 |
| 13. Bottom Ash and Debris Collection Basin | 401 KAR 63:010 |
| 14. Bottom Ash Reclaim Operation | 401 KAR 63:010 |
| 15. Bottom Ash Transport Vehicles | 401 KAR 59:010 |
| 16. Maintenance Shop Activities | N/A |
| 17. Miscellaneous Water Storage Tanks | N/A |
| 18. Anhydrous Ammonia Storage Tanks | 401 KAR 68 |
| 19. Gypsum Barge Load-out Facility | 401 KAR 63:010 |
| 20. Flyash Barge Load-out Facility | 401 KAR 63:010 |
| 21. Removed (Now EU 42) | |
| 22. Emergency Limestone Stockpile | 401 KAR 63:010 |
| 23. FGD Additive Chemical tank (22,000 gallons) | N/A |
| 24. PAC Storage Silos (for TC1, For TC2 see EU44) | 401 KAR 59:010 |

| | <u>Description</u> | <u>Generally Applicable Regulation</u> |
|-----|---|--|
| 25. | SO ₃ Mitigation System (for TC1) | 401 KAR 63:010 |
| 26. | Fuel Additive Facility (two silos, conveyors, mix and feed tanks) | 401 KAR 63:010 |
| 27. | Fuel Additive Facility Propane tank (1000 gallon) | N/A |
| 28. | Fuel Additive Facility Four Propane (indirect heat exchangers) water heaters (0.25 MMBtu/hr, each) | N/A |
| 29. | CCR Handling or Transport, Bottom Ash Handling Process | 401 KAR 63:010 |
| 30. | CCR Handling or Transport, Flyash Handling Process | 401 KAR 63:010 |
| 31. | CCR Handling or Transport, Gypsum Processing (no crushing or grinding) | 401 KAR 63:010 |
| 32. | CCR Handling or Transport, Flyash Separator Units (4) | 401 KAR 63:010 |
| 33. | CCR Handling or Transport, Flyash Storage Silos (2) | 401 KAR 63:010 |
| 34. | Landfill truck Loading Station | 401 KAR 63:010 |
| 35. | CCR Handling or Transport, Bottom Ash Transport | 401 KAR 63:010 |
| 36. | Liquid Hg Control Additives | N/A |
| 37. | (1) 4000 gallon #2 fuel oil tank | N/A |
| 38. | (2) 300 gallon #2 fuel oil tanks | N/A |
| 39. | Preheaters for High Pressure Natural Gas Regulating Station. Consists of (5) 0.77 MMBtu/hr. indirect heat exchangers and (1) 6000 Btu/hr catalytic heater for heating the pilot gas for the five indirect heat exchangers | N/A |
| 40. | (1) 500 gallon Odorant Storage Tank | N/A |
| 41. | Process water Hydrated Lime Silos | N/A |
| 42. | Process Water System Solid Material Handling | N/A |
| 43. | Process Water System Solid Material Piles (wind erosion) | N/A |
| 44. | Process Water System Solids Material Transport Operation (Haul Trucks) | N/A |
| 45. | Hydrogen Peroxide Tank (6,500 gallons) | N/A |
| 46. | Nutrient Tank (18,500 gallons) | N/A |
| 47. | Sodium Bisulfate Totes (275 gallons) | N/A |
| 48. | Citric Acid Totes (275 gallons) | N/A |
| 49. | Sodium Hypochlorite Totes (275 gallons) | N/A |

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. Nitrogen oxides, sulfur dioxide, filterable particulate matter, opacity, mercury, volatile organic compounds, sulfuric acid mist, fluorides, lead, and carbon monoxide 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.
3. The consecutive twelve (12)-month rolling total emissions in tons per year from Emission Units 31, 32, and 33 shall be less than: 1,523 for NO_x, 3,264 for SO₂, 98 for VOC and 0.55 for lead [401 KAR 51:017].

Compliance Demonstration Method:

The permittee shall gather data for each unit from CEMS if possible, or calculate monthly emissions for each unit based on emission factors from test data or AP-42 and operation records if necessary, and maintain a twelve (12)-month rolling total for the three units together [401 KAR 52:020, Section 10].

4. Source-Wide 40 CFR 63, Subpart UUUUU Requirements, as of V-22-028 issuance:

1. Operating Limitations:

- a. For Emission Unit 01 and Emission Unit 31, the permittee shall conduct a tune-up of the burner and combustion controls at least each thirty-six (36) calendar months, or each forty-eight (48) calendar months if neural network combustion optimization software is employed, as specified in 40 CFR 63.10021(e). [40 CFR 63.9991(a)(1) referencing Table 3, Item 1.; 40 CFR 63.10000(e); 40 CFR 63.10006(i)]

Compliance Demonstration Method:

Prior to January 1, 2024, the permittee shall report the tune-up date electronically, in a PDF file, in the semiannual compliance report, as specified in 40 CFR 63.10031(f)(4) and (6) and, if requested by the Administrator, in hard copy, to the Division's Florence Regional Office and to the U.S. EPA as required in 40 CFR 63.10031(f). On and after January 1, 2024, report the tune-up date electronically in the quarterly compliance report, in accordance with 40 CFR 63.10031(g) and Section 10.2 of Appendix E of 40 CFR 63, Subpart UUUUU. [40 CFR 63.10021(e)(9)].

- b. For startup of Emission Unit 01 and Emission Unit 31, the permittee shall use either of the following work practice standards: [40 CFR 63.9991(a)(1) and 40 CFR 63.10000(a), referencing Table 3, Item 3.a.]
 - i. If the permittee chooses to comply using paragraph (1) of the definition of "startup" in 40 CFR 63.10042, the permittee shall operate all CMS during startup. Startup means either the first-ever firing of fuel in Emission Units 01 or 31 for the purpose of producing electricity, or the firing of fuel in Emission Units 01 or 31 after a shutdown event for any purpose. Startup ends when any of the steam from Emission

Units 01 or 31 is used to generate electricity for sale over the grid or for any other purpose (including on-site use). Any fraction of an hour in which startup occurs constitutes a full hour of startup. For startup of the Emission Units 01 or 31, the permittee shall use clean fuels as defined in 40 CFR 63.10042 for ignition. Once the permittee converts to firing coal, residual oil, or solid oil-derived fuel, the permittee shall engage all of the applicable control technologies except dry scrubber and SCR. The permittee shall start the dry scrubber and SCR systems, if present, appropriately to comply with relevant standards applicable during normal operation. [40 CFR 63.9991(a)(1) and 40 CFR 63.10000(a), referencing Table 3, Item 3.a.(1)]

- ii. If the permittee chooses to comply using paragraph (2) of the definition of “startup” in 40 CFR 63.10042, the permittee shall operate all CMS during startup, collect appropriate data, and calculate the pollutant emission rate for each hour of startup. For startup of Emission Unit 01 or 31, the permittee shall use one or a combination of the clean fuels defined in 40 CFR 63.10042 to the maximum extent possible, taking into account considerations such as boiler or control device integrity, throughout the startup period. The permittee shall have sufficient clean fuel capacity to engage and operate the PM control devices within one hour of adding coal, residual oil, or solid oil-derived fuel to the unit. The permittee shall meet the startup period work practice requirements as identified in 40 CFR 63.10020(e). Once the permittee converts to firing coal, residual oil, or solid oil-derived fuel, the permittee shall vent emissions to the main stack(s). The permittee shall comply with the applicable emission limits beginning with the hour after startup ends. The permittee shall engage and operate the PM controls within 1 hour of first firing of coal, residual oil, or solid oil-derived fuel. The permittee shall start all other applicable control devices as expeditiously as possible, considering safety and manufacturer/supplier recommendations, but, in any case, when necessary to comply with the standards made applicable to the units by a permit limit or a rule other than 40 CFR 63, Subpart UUUUU that require operation of the control devices. [40 CFR 63.9991(a)(1) and 40 CFR 63.10000(a), referencing Table 3, Item 3.a.(2)]

Compliance Demonstration Method:

The permittee shall keep records during periods of startup and shutdown. The permittee shall provide reports concerning activities and periods of startup, as specified in 40 CFR 63.10011(g) and 40 CFR 63.10021(h) and (i). If the permittee elects to use paragraph (2) of the definition of startup in 40 CFR 63.10042, the permittee shall report the applicable information in 40 CFR 63.10031(c)(5) concerning startup periods as follows: For startup periods that occur on or prior to December 31, 2023, in PDF files in the semiannual compliance report; for startup periods that occur on or after January 1, 2024, quarterly, in PDF files, according to 40 CFR 63.10031(i). [40 CFR 63.9991(a)(1) and 40 CFR 63.10000(a), referencing Table 3, Item 3.a.(1)]

- c. During shutdown of Emission Unit 01 and Emission Unit 31, the permittee shall operate all CMS, collect appropriate data, and calculate the pollutant emission rate for each hour of shutdown for those pollutants for which a CMS is used. The permittee

shall vent emissions to the main stacks and operate all applicable control devices and continue to operate those control devices after the cessation of coal fuel being fed into Emission Unit 01 or 31 and for as long as possible thereafter considering operational and safety concerns. In any case, the permittee shall operate controls when necessary to comply with other standards made applicable to Emission Unit 01 or 31 by a permit limit or rule that requires operation of the control devices. Shutdown ends when there is both no electricity being generated, and no fuel being fired in the boiler. [40 CFR 63.9991(a)(1) and 40 CFR 63.10000(a), referencing Table 3, Item 4.]

Shutdown means the period in which cessation of operation of Emission Unit 01 or 31 is initiated for any purpose. Shutdown begins when Emission Unit 01 or 31 no longer generates electricity or makes useful thermal energy (such as heat or steam) for industrial, commercial, heating, or cooling purposes or when no coal, liquid oil, syngas, or solid oil-derived fuel is being fired in Emission Unit 01 or 31, whichever is earlier. Shutdown ends when Emission Unit 01 or 31 no longer generates electricity or makes useful thermal energy (such as steam or heat) for industrial, commercial, heating, or cooling purposes, and no fuel is being fired in Emission Units 01 or 31. Any fraction of an hour in which shutdown occurs constitutes a full hour of shutdown. [40 CFR 63.10042]

Compliance Demonstration Method:

The permittee shall collect monitoring data during shutdown periods, as specified in 40 CFR 63.10020(a). The permittee shall keep records during shutdown periods, as provided in 40 CFR 63.10032 and 40 CFR 63.10021(h). The permittee shall provide reports concerning activities and shutdown periods, as specified in 40 CFR 63.10011(g), 40 CFR 63.10021(i) and 40 CFR 63.10031. If the permittee elects to use paragraph (2) of the definition of startup in 40 CFR 63.10042, the permittee shall report the applicable information in 40 CFR 63.10031(c)(5) concerning shutdown periods as follows: For shutdown periods that occur on or prior to December 31, 2023, in PDF files in the semiannual compliance report; for shutdown periods that occur on or after January 1, 2024, quarterly, in PDF files, according to 40 CFR 63.10031(i). [40 CFR 63.9991(a)(1) and 40 CFR 63.10000(a), referencing Table 3, Item 4.]

- d. For Emission Unit 01 and Emission Unit 31, the permittee shall operate and maintain the coal-fired boilers, including associated air pollution control equipment and monitoring equipment at all times, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.10000(b)]

2. Emission Limitations:

- a. For Emission Unit 01 and Emission Unit 31, the permittee shall comply with all applicable emission limits under 40 CFR 63, Subpart UUUUU at all times except for

periods that meet the applicable definitions of startup and shutdown in 40 CFR 63, Subpart UUUUU [40 CFR 63.10000(a)].

Compliance Demonstration Method:

The permittee shall collect monitoring data during startup and shutdown periods, as specified in 40 CFR 63.10020(a) and (e). The permittee shall keep records during periods of startup and shutdown, as provided in 40 CFR 63.10032 and 40 CFR 63.10021(h). The permittee shall provide reports concerning activities and periods of startup and shutdown, as specified in 40 CFR 63.10011(g), 40 CFR 63.10021(i), and 40 CFR 63.10031. [40 CFR 63, Subpart UUUUU, Table 3, Items 3.d. and 4.]

- b. At all times, emissions from Emission Units 01 and 31 shall not exceed the limitations in the table below: [40 CFR 63.9991(a)(1), referencing Table 2, Item 1]

| Pollutant | Emission Limit | Compliance Demonstration |
|---------------------------|---|--|
| PM | 0.030 lb/MMBtu OR 0.30 lb/MWh (gross output) | Quarterly Stack Testing OR PM CEMS [Table 5. Item 1.; and Table 7. also 40 CFR 63.10005] |
| OR | | |
| Total Non-Hg HAP Metals | 0.000050 lb/MMBtu OR 0.50 lb/GWh | Quarterly Stack Testing [Table 5. Item 1.; and Table 7. also 40 CFR 63.10005] |
| OR | | |
| All of these: Antimony | 0.80 lb/TBtu OR 0.0080 lb/GWh | Quarterly Stack Testing for Each [Table 5. Item 1.; and Table 7. also 40 CFR 63.10005] |
| Arsenic | 1.1 lb/Tbtu OR 0.020 lb/GWh | |
| Beryllium | 0.20 lb/TBtu OR 0.0020 lb/GWh | |
| Cadmium | 0.30 lb/TBtu OR 0.0030 lb/GWh | |
| Chromium | 2.8 lb/TBtu OR 0.0030 lb/GWh | |
| Cobalt | 0.80 lb/TBtu OR 0.0080 lb/GWh | |
| Lead | 1.2 lb/TBtu OR 0.020 lb/GWh | |

| Pollutant | Emission Limit | Compliance Demonstration |
|------------------|--|--|
| Manganese | 4.0 lb/TBtu OR 0.050 lb/GWh | |
| Nickel | 3.5 lb/TBtu OR 0.040 lb/GWh | |
| Selenium | 5.0 lb/TBtu OR 0.060 lb/GWh | |
| AND | | |
| HCl | 0.0020 lb/MMBtu OR 0.020 lb/MWh | Quarterly Stack Testing OR HCl/HF CEMS [Table 5. Item 3; and Table 7. Also 40 CFR 63.10005] |
| OR | | |
| SO ₂ | 0.20 lb/MMBtu OR 1.5 lb/MWh | SO ₂ CEMS. [Table 5. Item 5.; and Table 7.] |
| AND | | |
| Hg | 1.2 lb/TBtu, OR 0.013 lb/GWh | Hg CEMS. [Table 5, Item 4.; and Table 7. also 40 CFR 63.10005.] OR Sorbent Trap Monitoring. [Table 5. Item 4; and Table 7. also 40 CFR 63.10005.] |

3. Testing Requirements:

- a. Test protocols shall be submitted for the Division’s approval a minimum of sixty (60) days prior to the scheduled test date [401 KAR 50:045, Section 1].
- b. For Emission Unit 01 and Emission Unit 31, the permittee shall comply with all applicable provisions of 40 CFR 63.10005 through 40 CFR 63.10009 and 40 CFR 63.10011. [40 CFR 63.9981]

4. Monitoring Requirements:

- a. The permittee shall comply with all applicable continuous monitoring requirements of 40 CFR 63.10010, 40 CFR 63.10020, and 40 CFR 63.10021. [40 CFR 63.9981]
- b. If the permittee chooses to rely on paragraph (2) of the definition of “startup” in 40 CFR 63.10042, the permittee shall monitor the additional requirements during startup periods or shutdown periods as required by 40 CFR 63.10020(e).

5. Recordkeeping Requirements:

For Emission Unit 01 and Emission Unit 31, the permittee shall maintain records according to 40 CFR 63.10032 and 63.10033.

6. Reporting Requirements:

- a. For Emission Unit 01 and Emission Unit 31, the permittee shall submit each of the following reports that apply: [40 CFR 63.10031(a)]
 - i. If the permittee elects to monitor Hg emissions continuously, the permittee shall meet the electronic reporting requirements of Appendix A to 40 CFR 63, Subpart UUUUU. [40 CFR 63.10031(a)(1)]
 - ii. In regards to PM CEMS, the permittee shall meet the electronic reporting requirements of Appendix C to 40 CFR 63, Subpart UUUUU. Electronic reporting of hourly PM emissions data shall begin with the later of the first operating hour on or after January 1, 2024; or the first operating hour after completion of the initial PM CEMS correlation test. [40 CFR 63.10031(a)(3)]
 - iii. In regards to SO₂ CEMS, the permittee shall use the ECMPS Client Tool to submit the information required in 40 CFR 63.10031(a)(5)(i) through (iii) to EPA (except where it is already required to be reported or has been previously provided under the Acid Rain Program or another emissions reduction program that requires the use of 40 CFR part 75. [40 CFR 63.10031(a)(5)]
 - iv. PDF reports for all RATAs of Hg, HCl, HF, and/or SO₂ monitoring systems completed prior to January 1, 2024, and for correlation tests, RRAs and/or RCAs of PM CEMS completed prior to January 1, 2024, according to 40 CFR 63.10031(f)(1) and (6) and Table 8 to 40 CFR 63, Subpart UUUUU. [40 CFR 63, Subpart UUUUU, Table 8, Item 7.]
 - v. Quarterly reports, in PDF files, that include all 30-boiler operating day rolling averages in the reporting period derived from the PM CEMS, according to 40 CFR 63.10031(f)(2) and (6). [40 CFR 63, Subpart UUUUU, Table 8, Item 8.]
- b. For Emission Unit 01 and Emission Unit 31, the final quarterly averages report in PDF files shall cover the fourth calendar quarter of 2023. Starting with the first quarter of 2024, the permittee shall report all 30-boiler operating day rolling averages for PM CEMS, Hg CEMS, Hg sorbent trap systems, and SO₂ CEMS (or 90-boiler operating day rolling averages for Hg systems), in XML format, in the quarterly compliance reports required under 40 CFR 63.10031(g). The quarterly compliance reports shall be submitted no later than 60 days after the end of each calendar quarter. [40 CFR 63, Subpart UUUUU, Table 8, Item 8.]
- c. For Emission Unit 01 and Emission Unit 31, the permittee shall submit semi-annual compliance reports according to the requirements in 40 CFR 63.10031(b)(1) through (5) [40 CFR 63.10031(b)]. The report shall contain the information required in 40 CFR 63.10031(c)(1) through (10) [40 CFR 63.10031(c)] and excess emissions and monitor downtime summary report described in 40 CFR 63.10(e)(3)(vi) [40 CFR 63.10031(d)]. The final semiannual compliance report shall cover the reporting period from July 1, 2023 through December 31, 2023 [40 CFR 63.10031(b)(6)].
- d. For Emission Unit 01 and Emission Unit 31, starting with the first calendar quarter of 2024, reporting of the information under 40 CFR 63.10(e)(3)(vi) (and under 40 CFR 63.10(e)(3)(v), if the applicable excess emissions and/or monitor downtime threshold is exceeded) is discontinued for all CMS, and the permittee shall, instead, include in the quarterly compliance reports described in 40 CFR 63.10031(g) the applicable data

elements in 40 CFR 63, Subpart UUUUU, Appendix E, Section 13 for any “deviation” (as defined in 40 CFR 63.10042 and elsewhere in 40 CFR 63, Subpart UUUUU) that occurred during the calendar quarter. If there were no deviations, the permittee shall include a statement to that effect in the quarterly compliance report. [40 CFR 63.10031(d)]

- e. For each performance stack test completed prior to January 1, 2024, the permittee shall submit a PDF test report in accordance with 40 CFR 63.10031(f)(6) no later than 60 days after the date on which the testing is completed. For each test completed on or after January 1, 2024, in accordance with 40 CFR 63.10031(g), submit the applicable reference method information in 40 CFR 63, Subpart UUUUU, Appendix E, Sections 17 through 31 along with the quarterly compliance report for the calendar quarter in which the test was completed. [40 CFR 63.10031(f)]
- f. If the permittee elects to use a certified PM CEMS to monitor PM emissions continuously to demonstrate compliance with 40 CFR 63, Subpart UUUUU and has begun recording valid data from the PM CEMS prior to November 9, 2020, the permittee shall use the ECMPS Client Tool to submit a detailed report of the PS 11 correlation test (see Appendix B to 40 CFR part 60) in a PDF file no later than 60 days after that date. For a correlation test completed on or after November 9, 2020, but prior to January 1, 2024, the permittee shall submit the PDF report no later than 60 days after the date on which the test is completed. For a correlation test completed on or after January 1, 2024, the permittee shall submit the PDF report according to Section 7.2.4 of Appendix C to 40 CFR 63, Subpart UUUUU. The applicable data elements in 40 CFR 63.10031(f)(6)(i) through (xii) shall be entered into ECMPS with the PDF report. [40 CFR 63.10031(j)]
- g. Emission Unit 01 became subject to the 40 CFR 63, Subpart UUUUU requirements on February 8, 2016, and Emission Unit 31 became subject to 40 CFR 63, Subpart UUUUU on April 16, 2015. The permittee shall submit Notification of Compliance Status reports according to 40 CFR 63.10030(e) [40 CFR 63.10011(e)].

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.

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].

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;
- 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 | U.S. EPA Region 4 |
| Florence Regional Office | Air Enforcement Branch |
| 8020 Veterans Memorial Drive | Atlanta Federal Center |
| Suite 110 | 61 Forsyth St. SW |
| Florence, KY 41042 | 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.

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)].

- 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].
- l. 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.].
- 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-22-028).

5. Testing Requirements

- 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 NO_x 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;
 - (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*.
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.

SECTION H - ALTERNATE OPERATING SCENARIOS

N/A

SECTION I - COMPLIANCE SCHEDULE

N/A

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 Units 1, 2, and 5-10 (Emission Units 01, 31, and 25-30). Emission Units 01 and 31 are coal-fired base load electric generating units. Emission Units 25-30 are natural gas-fired combustion turbines. The Acid Rain Permit Application and NO_x Compliance Plan received on November 6, 2012 are hereby incorporated into and made part of this permit and the permittee shall 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: 1 | | | | | |
|--|--------|--------|--------|--------|--------|
| Year for SO₂ Allowances* | 2022 | 2023 | 2024 | 2025 | 2026 |
| 40 CFR Part 73.10 | 9,651* | 9,651* | 9,651* | 9,651* | 9,651* |
| NO_x Limits and Requirements | | | | | |
| <p>(i) Pursuant to 40 CFR Part 76, the Kentucky Division for Air Quality approves the NO_x emissions averaging plan for this unit. This plan is effective beginning calendar year 2015. Under this plan, determined in accordance with 40 CFR Part 75, this unit's NO_x emissions shall not exceed the annual average alternative contemporaneous emissions limitation (ACEL) of 0.40 lb/MMBtu.</p> <p>(ii) In addition, the actual BTU-weighted annual average NO_x emissions rate for the unit in the plan shall be less than or equal to the BTU-weighted annual average NO_x emissions rate for the same unit had it been operated, during the same period of time, in compliance with the applicable emissions limitations under 40 CFR Part 76.5, 76.6, or 76.7.</p> <p>(iii) If the designated representative demonstrates that the requirement of condition (ii) (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emissions limitation set in condition (i).</p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.</p> | | | | | |

| | | | | | |
|---|------|------|------|------|------|
| Affected Unit: 31 | | | | | |
| Year for SO₂ Allowances* | 2020 | 2021 | 2022 | 2023 | 2024 |
| 40 CFR Part 73.10 | 0* | 0* | 0* | 0* | 0* |
| NO_x Limits and Requirements | | | | | |
| N/A | | | | | |

| | | | | | |
|---|------|------|------|------|------|
| Affected Units: 25-30 | | | | | |
| Year for SO₂ Allowances* | 2020 | 2021 | 2022 | 2023 | 2024 |
| 40 CFR Part 73.10 | 0* | 0* | 0* | 0* | 0* |
| NO_x Limits and Requirements | | | | | |
| N/A | | | | | |

*The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U. S. EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

4. Compliance Plan:

- a. The permittee shall operate in compliance with the requirements contained in the Acid Rain application and incorporated into this permit [40 CFR 72.9].
- b. The Division approves the NO_x Average Plan submitted for these units for the NO_x Emissions Compliance Plan, effective for the duration of this permit. Under this plan, a unit’s NO_x emissions shall not exceed the applicable annual average alternative contemporaneous emissions limitation (ACEL) listed in Subsection 3(a). [40 CFR 76]
 - (1) The actual Btu-weighted annual average NO_x emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emission rate for the same unit had it been operated, during the same period of time, in compliance with the individual applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7 and listed in Subsection 3(a).
 - (2) For each unit, if the designated representative demonstrates that the requirement of Subsection 4(b)(1) is met for the plan year, then the unit shall be deemed to be in compliance for the year with its ACEL and associated heat input limit in Subsection 3.
 - (3) If the designated representative cannot make the demonstration in Subsection 4(b)(1), according to 40 CFR 76.11(d)(1)(ii), for the plan year and if a unit fails to meet the annual average ACEL or has a heat input greater than the applicable value listed in Subsection 3, then excess emissions of NO_x have occurred during the year for that unit.
 - (4) As an alternative means of compliance demonstration, this emission unit shall not cause the system weighted average to exceed the applicable emission rate in accordance with 40 CFR 76.11(d)(B)(ii).

SECTION K – CLEAN AIR INTERSTATE RULE (CAIR)

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

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

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 3 Trading Program, and CSAPR SO₂ Group 1 Trading Program.

| Unit ID: 01, Pulverized Coal-Fired, Dry Bottom, Tangentially-Fired Boiler | | | | | |
|---|--|---|---|---|---|
| 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 |
| SO ₂ | X | | | | |
| NO _x | X | | | | |
| Heat Input | X | | | | |

| Unit ID: 25-30, Six Natural Gas-Fired Simple Cycle Combustion Turbines | | | | | |
|--|--|---|---|---|---|
| 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 |
| SO ₂ | | X | | | |
| NO _x | X | | | | |
| Heat Input | | X | | | |

| Unit ID: 31, Pulverized Coal-Fired Supercritical Boiler | | | | | |
|---|--|---|---|---|---|
| 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 |
| 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 40 CFR 97.430 through 97.435 (CSAPR NO_x Annual Trading Program), 97.1030 through 97.1035 (CSAPR NO_x Ozone Season Group 3 Trading Program), and 97.630 through 97.635 (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>.
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 part 75, subpart E and 40 CFR 75.66 and 97.435 (CSAPR NO_x Annual Trading Program), 97.1035 (CSAPR NO_x Ozone Season Group 3 Trading Program), and/or 97.635 (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/part-75-petition-responses>.
4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (CSAPR NO_x Annual Trading Program), 97.1030 through 97.1034 (CSAPR NO_x Ozone Season Group 3 Trading Program), and/or 97.630 through 97.634 (CSAPR SO₂ Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (CSAPR NO_x Annual Trading Program), 97.1035 (CSAPR NO_x Ozone

Season Group 3 Trading Program), and/or 97.635 (CSAPR SO₂ Group 1 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 <https://www.epa.gov/airmarkets/data-resources>.

5. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (CSAPR NO_x Annual Trading Program), 97.1030 through 97.1034 (CSAPR NO_x Ozone Season Group 3 Trading Program), and 97.630 through 97.634 (CSAPR SO₂ Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add or change this unit's monitoring system description.

CSAPR NO_x Annual Trading Program Requirements (40 CFR 97.406)

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 40 CFR 97.413 through 97.418.

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 40 CFR 97.430 through 97.435.
- 2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of CSAPR NO_x Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 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 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

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 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 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 40 CFR part 97, subpart AAAAA 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 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 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 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 the year of 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 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).
 - iv) It shall not be a violation of 40 CFR part 97, subpart AAAAA 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 40 CFR part 97, subpart AAAAA 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 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 40 CFR 97.430(b) and for each control period thereafter.
- 4) Vintage of CSAPR NO_x Annual 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 must be a CSAPR NO_x Annual allowance that was allocated or auctioned 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 (c)(2)(i) through (iii) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year.
- 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 40 CFR part 97, subpart AAAAA.
- 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 part 97, subpart AAAAA, 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 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 40 CFR part 97, subpart AAAAA.
- 2) A description of whether a unit is required to monitor and report NO_x emissions using a continuous emission monitoring system (under 40 CFR part 75, subpart H), an excepted monitoring system (under 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (under 40 CFR 75.19), and an alternative monitoring system (under 40 CFR part 75, subpart E) in accordance with 40 CFR 97.430 through 97.435 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with 40 CFR 70.7(e)(2) and 71.7(e)(1), provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with 70.7(e)(2)(i)(B) and 71.7(e)(1)(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 keep 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 40 CFR 97.416 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 40 CFR 97.416 changing the designated representative.
 - ii) All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAAA.

- 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 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.
- 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 40 CFR 97.405 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.

CSAPR NO_x Ozone Season Group 3 Trading Program Requirements (40 CFR 97.1006)

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 40 CFR 97.1013 through 97.1018.

b) Emissions monitoring, reporting, and recordkeeping requirements.

- 1) The owners and operators, and the designated representative, of each CSAPR NO_x Ozone Season Group 3 source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.1030 through 97.1035.
- 2) The emissions data determined in accordance with 40 CFR 97.1030 through 97.1035 shall be used to calculate allocations of CSAPR NO_x Ozone Season Group 3 allowances under 40 CFR 97.1011(a)(2) and (b) and 97.1012 and to determine compliance with the CSAPR NO_x Ozone Season Group 3 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 40 CFR 97.1030 through 97.1035 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 3 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 3 source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall hold, in the source's compliance account, CSAPR NO_x Ozone Season Group 3 allowances available for deduction for such control period under 40 CFR 97.1024(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 3 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 3 units at a CSAPR NO_x Ozone Season Group 3 source are in excess of the CSAPR NO_x Ozone Season Group 3 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 3 unit at the source shall hold the CSAPR NO_x Ozone Season Group 3 allowances required for deduction under 40 CFR 97.1024(d); and

B) The owners and operators of the source and each CSAPR NO_x Ozone Season Group 3 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 40 CFR part 97, subpart GGGGG and the Clean Air Act.

2) CSAPR NO_x Ozone Season Group 3 assurance provisions.

i) If total NO_x emissions during a control period in a given year from all CSAPR NO_x Ozone Season Group 3 units at CSAPR NO_x Ozone Season Group 3 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 3 allowances available for deduction for such control period under 40 CFR 97.1025(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.1025(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 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 base CSAPR NO_x Ozone Season Group 3 units at base CSAPR NO_x Ozone Season Group 3 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 3 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 the year of such control period.
- iii) Total NO_x emissions from all CSAPR NO_x Ozone Season Group 3 units at base CSAPR NO_x Ozone Season Group 3 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 3 trading budget under 40 CFR 97.1010(a) and the state's variability limit under 40 CFR 97.1010(b), and, for the control period in 2021 only, the product (rounded to the nearest allowance) of 1.21 multiplied by the supplemental amount of CSAPR NO_x Ozone Season Group 3 allowances determined for the state under 40 CFR 97.1010(d).
- iv) It shall not be a violation of 40 CFR part 97, subpart GGGGG or of the Clean Air Act if total NO_x emissions from all base CSAPR NO_x Ozone Season Group 3 units at base CSAPR NO_x Ozone Season Group 3 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 base CSAPR NO_x Ozone Season Group 3 units at base CSAPR NO_x Ozone Season Group 3 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 3 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 3 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 40 CFR part 97, subpart GGGGG and the Clean Air Act.
- 3) Compliance periods.
- i) A CSAPR NO_x Ozone Season Group 3 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2021 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.1030(b) and for each control period thereafter.
- ii) A base CSAPR NO_x Ozone Season Group 3 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2021 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.1030(b) and for each control period thereafter.

- 4) Vintage of CSAPR Ozone Season Group 3 allowances held for compliance.
 - i) A CSAPR NO_x Ozone Season Group 3 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 3 allowance that was allocated or auctioned for such control period or a control period in a prior year.
 - ii) A CSAPR NO_x Ozone Season Group 3 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (c)(2)(i) through (iii) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 3 allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year.
 - 5) Allowance Management System requirements. Each CSAPR NO_x Ozone Season Group 3 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart GGGGG.
 - 6) Limited authorization. A CSAPR NO_x Ozone Season Group 3 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 3 Trading Program; and
 - ii) Notwithstanding any other provision of 40 CFR part 97, subpart GGGGG, 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 3 allowance does not constitute a property right.
- d) Title V permit requirements.**
- 1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Ozone Season Group 3 allowances in accordance with 40 CFR part 97, subpart GGGGG.
 - 2) A description of whether a unit is required to monitor and report NO_x emissions using a continuous emission monitoring system (under 40 CFR part 75, subpart H), an excepted monitoring system (under 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (under 40 CFR 75.19), or an alternative monitoring system (under 40 CFR part 75, subpart E) in accordance with 40 CFR 97.1030 through 97.1035 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with 40 CFR 70.7(e)(2) and 71.1(e)(1), provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with 40 CFR 70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B).

e) Additional recordkeeping and reporting requirements.

- 1) Unless otherwise provided, the owners and operators of each CSAPR NO_x Ozone Season Group 3 source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall keep 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 40 CFR 97.1016 for the designated representative for the source and each CSAPR NO_x Ozone Season Group 3 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 40 CFR 97.1016 changing the designated representative.
 - ii) All emissions monitoring information, in accordance with 40 CFR part 97, subpart GGGGG.
 - 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 3 Trading Program.
- 2) The designated representative of a CSAPR NO_x Ozone Season Group 3 source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall make all submissions required under the CSAPR NO_x Ozone Season Group 3 Trading Program, except as provided in 40 CFR 97.1018. 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 parts 70 and 71.

f) Liability.

- 1) Any provision of the CSAPR NO_x Ozone Season Group 3 Trading Program that applies to a CSAPR NO_x Ozone Season Group 3 source or the designated representative of a CSAPR NO_x Ozone Season Group 3 source shall also apply to the owners and operators of such source and of the CSAPR NO_x Ozone Season Group 3 units at the source.
- 2) Any provision of the CSAPR NO_x Ozone Season Group 3 Trading Program that applies to a CSAPR NO_x Ozone Season Group 3 unit or the designated representative of a CSAPR NO_x Ozone Season Group 3 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 3 Trading Program or exemption under 40 CFR 97.1005 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Ozone Season Group 3 source or CSAPR NO_x Ozone Season Group 3 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 (40 CFR 97.606)

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 40 CFR 97.613 through 97.618.

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 40 CFR 97.630 through 97.635
- 2) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of CSAPR SO₂ Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 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 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

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 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 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 40 CFR part 97, subpart CCCCC 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 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 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 the year of 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 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).
 - iv) It shall not be a violation of 40 CFR part 97, subpart CCCCC 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 40 CFR part 97, subpart CCCCC 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 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 40 CFR 97.630(b) and for each control period thereafter.
 - 4) Vintage of CSAPR SO₂ Group 1 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 must be a CSAPR SO₂ Group 1 allowance that was allocated or auctioned 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 must be a CSAPR SO₂ Group 1 allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year.
 - 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 40 CFR part 97, subpart CCCCC.
 - 6) Limited authorization. A 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 40 CFR part 97, subpart CCCCC, 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 SO₂ Group 1 allowance does not constitute a property right.
- d) Title V permit 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 40 CFR part 97, subpart CCCCC.

- 2) A description of whether a unit is required to monitor and report SO₂ emissions using a continuous emission monitoring system (under 40 CFR part 75, subpart B), an excepted monitoring system (under 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (under 40 CFR 75.19), or an alternative monitoring system (under 40 CFR part 75, subpart E) in accordance with 40 CFR 97.630 through 97.635 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with 40 CFR 70.7(e)(2) and 71.7(e)(1), provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with 40 CFR 70.7(e)(2)(i)(B) and 71.7(e)(1)(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 keep 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 40 CFR 97.616 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 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 40 CFR part 97, subpart CCCCC.
 - 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 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

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 40 CFR 97.605 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.