

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

**Proposed**

**AIR QUALITY PERMIT  
Issued under 401 KAR 52:020**

**Permittee Name:** Kentucky Municipal Energy Agency  
**Mailing Address:** 1700 Eastpoint Parkway, Suite 220, Louisville,  
KY 40223

**Source Name:** Kentucky Municipal Energy Agency Energy  
Center I  
**Mailing Address:** 1700 Eastpoint Parkway, Suite 220, Louisville,  
KY 40223

**Source Location:** 1757 AC Slaton Road, Madisonville, KY 42431

**Permit ID:** V-25-010  
**Agency Interest #:** 184265  
**Activity ID:** APE20250001  
**Review Type:** Title V / Synthetic Minor, Construction / Operating  
**Source ID:** 21-107-00212

**Regional Office:** Owensboro Regional Office  
3032 Alvey Park Dr. W., Suite 700  
Owensboro, KY 42303  
(270) 687-7304

**County:** Hopkins

**Application**  
**Complete Date:** March 4, 2025  
**Issuance Date:** June 4, 2025  
**Expiration Date:** June 4, 2030

*Rick Shewekah*

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

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<b>Permit</b>	<b>Permit Type</b>	<b>Activity#</b>	<b>Complete Date</b>	<b>Issuance Date</b>	<b>Summary of Action</b>
V-25-010	Initial	APE20250001	2/18/2025	6/4/2025	Initial Construction Permit

## **SECTION A - PERMIT AUTHORIZATION**

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

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

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

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

### **Emission Units 01-04              Four Natural Gas-Fired RICE**

#### **Description:**

Model: Wartsila 18V50SG 2024 Model Year

Engine Type: 4SLB

Engine Rating: 25,574 HP Each

Fuel Input Capacity: 0.15 MMscf/hr each

Construction Commenced: Proposed June 2025

Primary Fuel: Natural Gas

Control Device: Selective Catalytic Reduction (SCR) and Oxidation Catalyst (OxCat)

#### **APPLICABLE REGULATIONS:**

**401 KAR 60:005, Section 2(2)(eeee)**, 40 CFR 60.4230 through 60.4248 Tables 1 through 4 (**Subpart JJJJ**), *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*

**401 KAR 63:002, Section 2(4)(eeee)**, 40 CFR 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. The permittee must at all times, except during startup and shutdown, operate and maintain associated air pollution control devices according to manufacturer's specifications. [To preclude 401 KAR 51:017]
- b. The permittee must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 60.4243(b)(2)(ii)]
- c. The permittee must comply with the applicable emission limitations and operating limitations in 40 CFR 63, Subpart ZZZZ upon startup of the affected source. [40 CFR 63.6595(a)(3)]
- d. The permittee must be in compliance with the emission limitations, operating limitations, and other requirements in 40 CFR 63, Subpart ZZZZ that apply at all times. [40 CFR 63.6605(a)]
- e. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by 40 CFR 63, Subpart ZZZZ, 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)]

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- f. The permittee must minimize the engines time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in 40 CFR 63, Subpart ZZZZ, Tables 1a, 2a, 2c, and 2d apply. [40 CFR 63.6625(h)]
- g. The permittee shall prepare and maintain, within 90 days of startup, a good combustion and operations practices plan (GCOP) that defines, measures, and verifies the use of the control devices. Any revisions requested by the Division shall be made and the revisions shall be maintained on site. The permittee shall operate according to the provisions of this plan at all times, including periods of startup, shutdown, and malfunction. The plan shall be incorporated into the plant standard operating procedures (SOP) and shall be made available for the Division's inspection. The plan shall include, but not be limited to: [401 KAR 52:020, Section 10]
  - i. A list of combustion optimization practices and a means of verifying the practices have occurred.
  - ii. Process and control device parameters to be monitored to determine compliance with the conditions of this permit, along with established operating levels or ranges, as applicable, for the engines and control devices.
  - iii. Procedures for the proper operation and maintenance of the engines and control devices used to meet the applicable emission limits or standards in this permit.
  - iv. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established by the manufacturer, during the most recent performance test, or this permit as applicable. This includes procedures to determine and record the cause of any deviation, the time the deviation began and ended, the corrective action taken, the time the corrective action initiated, and the time/date the corrective action was completed.

**2. Emission Limitations:**

- a. The permittee must comply with the emission standards in Table 1 of 40 CFR 60, Subpart JJJJ, as summarized below. For the purposes of 40 CFR 60, Subpart JJJJ, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included: [40 CFR 60.4233(e)]

g/HP-hr			ppmvd at 15% O <sub>2</sub>		
NO <sub>x</sub>	CO	VOC	NO <sub>x</sub>	CO	VOC
1.0	2.0	0.7	82	270	60

**Compliance Demonstration Method:**

The permittee must keep a maintenance plan and records of conducted maintenance, and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test and conduct subsequent performance testing every

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

8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. [40 CFR 60.4243(b)(2)(ii)]

- b. The permittee must operate and maintain stationary SI ICE that achieve the emission standards as required in 40 CFR 60.4233 over the entire life of the engine. [40 CFR 60.4234]
- c. The permittee must comply with the emission limitations in 40 CFR 63, Subpart ZZZZ, Table 2a: [40 CFR 63.6600(b)]
  - i. The permittee must meet the following emission limitation, except during periods of startup: [40 CFR 63, Subpart ZZZZ, Table 2a]
    - 1. Reduce CO emissions by 93 percent or more; or [40 CFR 63, Subpart ZZZZ, Table 2a, 2.a]
    - 2. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O<sub>2</sub>. [40 CFR 63, Subpart ZZZZ, Table 2a, 2.b.]

**Compliance Demonstration Method:**

See **3. Testing Requirements** c. and e., **4. Specific Monitoring Requirements** a. b. and d., and **5. Specific Recordkeeping Requirements** f.

- d. Deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. [40 CFR 63.6640(d)]

**3. Testing Requirements:**

- a. The permittee shall conduct an initial performance test to establish an uncontrolled emission factor in lb/MMscf, and a control efficiency for each NO<sub>x</sub>, CO, and VOC to be used to demonstrate compliance with the source-wide limits on NO<sub>x</sub>, CO, and VOC. During each test run, the permittee shall measure the inlet air temperature across the SCR and OxCat controls, the reagent feed rate to the SCR, and the pressure drop across the OxCat to establish operating parameters for the control systems. The initial performance test must be conducted within 60 days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities. This performance testing may be conducted in conjunction with the performance testing required by 40 CFR 60, Subpart JJJJ. Subsequent performance testing shall occur every 8,760 hours or 3 years, whichever comes first. Performance testing shall be conducted using the following U.S. EPA Reference Test Methods: [401 KAR 52:020, Section 10 and 401 KAR 50:045, Section 1]
  - i. U.S. EPA Reference Method 7 for NO<sub>x</sub>;
  - ii. U.S. EPA Reference Method 10 for CO;
  - iii. U.S. EPA Reference Method 18 for VOC; or

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

- iv. Other methods, as approved by the Division.
- b. The permittee must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter, to demonstrate compliance with the emissions limitations in 40 CFR 60.4233(e). [40 CFR 60.4243(b)(2)(ii)]
- c. The permittee must follow the procedures in 40 CFR 60.4244(a) through (f): [40 CFR 60.4244]
  - i. Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements of 40 CFR 60.8 and under the specific conditions specified by Table 2 of 40 CFR 60, Subpart JJJJ. [40 CFR 60.4244(a)]
  - ii. The permittee may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR 60.8(c). If the stationary SI internal combustion engine is non-operational, the permittee does not need to startup the engine solely to conduct a performance test; however, the permittee must conduct the performance test immediately upon startup of the engine. [40 CFR 60.4244(b)]
  - iii. The permittee must conduct three separate test runs for each performance test required in 40 CFR 60.4244, as specified in 40 CFR 60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour. [40 CFR 60.4244(c)]
  - iv. To determine compliance with the NO<sub>x</sub> mass per unit output emission limitation, convert the concentration of NO<sub>x</sub> in the engine exhaust using Equation 1 of 40 CFR 60.4244. [40 CFR 60.4244(d)]

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \quad [Eq\ 1]$$

Where:

ER = Emission rate of NO<sub>x</sub> in g/HP-hr

C<sub>d</sub> = Measured NO<sub>x</sub> concentration in parts per million by volume (ppmv)

1.912 × 10<sup>-3</sup> = conversion constant for ppm NO<sub>x</sub> to grams per standard cubic meter at 20 degrees Celsius

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

T = Time of test run, in hours

HP-hr = Brake work of the engine, horsepower-hour (HP-hr)

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- v. To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of 40 CFR 60.4244. [40 CFR 60.4244(e)]

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

Where:

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

$C_d$  = Measured CO concentration in parts per million by volume (ppmv)

$1.164 \times 10^{-3}$  = conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius

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

T = Time of test run, in hours

HP-hr = Brake work of the engine, horsepower-hour (HP-hr)

- vi. For purposes of 40 CFR 60, Subpart JJJJ, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of 40 CFR 60.4244. [40 CFR 60.4244(f)]

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr} \quad [Eq\ 3]$$

Where:

ER = Emission rate of VOC in g/HP-hr

$C_d$  = VOC concentration measured as propane in ppmv

$1.833 \times 10^{-3}$  = conversion constant for ppm VOC measured as propane to grams per standard cubic meter at 20 degrees Celsius

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

T = Time of test run, in hours

HP-hr = Brake work of the engine, horsepower-hour (HP-hr)

- vii. If the permittee chooses to measure VOC emissions using either Method 18 of 40 CFR Part 60, Appendix A, or Method 320 of 40 CFR 63, Appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in



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

measured values between these methods and Method 25A. The results from method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of 40 CFR 60.4244. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of 40 CFR 60.4244. [40 CFR 60.4244(g)]

$$RF_i = \frac{C_{Mi}}{C_{Ai}} \text{ [Eq 4]}$$

Where:

RF<sub>i</sub>= Response factor of compound i when measured with EPA Method 25A

C<sub>Mi</sub>= Measured concentration of compound i in ppmv as carbon

C<sub>Ai</sub>= True concentration of compound i in ppmv as carbon

$$C_{icorr} = RF_i \times C_{imeas} \text{ [Eq 5]}$$

Where:

C<sub>icorr</sub>= Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon

C<sub>imeas</sub>= Concentration of compound i measured by EPA Method 320, ppmv as carbon

$$C_{Peq} = 0.6098 \times C_{icorr} \text{ [Eq 6]}$$

Where:

C<sub>Peq</sub> = Concentration of compound i in mg of propane equivalent per DSCM.

- d. The permittee must conduct the initial performance test or other initial compliance demonstrations in 40 CFR 63, Subpart ZZZZ, Table 4 that apply within 180 days after the compliance date specified in 40 CFR 63.6595 and according to the provisions of 40 CFR 63.7(a)(2). [40 CFR 63.6610(a)]
- e. The permittee is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions of 40 CFR 63.6610(d)(1) through (5). [40 CFR 63.6610(d)]
  - i. The test must have been conducted using the same methods specified in 40 CFR 63, Subpart ZZZZ, and these methods must have been followed correctly. [40 CFR 63.6610(d)(1)]
  - ii. The test must not be older than 2 years. [40 CFR 63.6610(d)(1)]
  - iii. The test must be reviewed and accepted by the Administrator. [40 CFR 63.6610(d)(3)]

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- iv. Either no process or equipment changes must have been made since the test was performed, or the permittee must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes. [40 CFR 63.6610(d)(4)]
- v. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load. [40 CFR 63.6610(d)(5)]
- f. The permittee must conduct subsequent performance tests as specified in 40 CFR 63, Subpart ZZZZ, Table 3. [40 CFR 63.6615]
  - i. The permittee must conduct subsequent performance tests semiannually. After the permittee has demonstrated compliance for two consecutive tests, the permittee may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or the permittee deviates from any operating limitation, the permittee must resume semiannual performance tests. [40 CFR 63, Subpart ZZZZ, Table 3 Items 1 & 3]
- g. Each performance test must be conducted according to the requirements of 40 CFR 63, Subpart ZZZZ, Table 4. If the permittee has a non-operational stationary RICE that is subject to performance testing, the permittee does not need to start up the engine solely to conduct the performance test. The permittee of a non-operational engine can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE. [40 CFR 63.6620(b) and 63.6620(b)(2)]
  - i. To comply with the requirement to reduce CO emissions, the permittee must: [40 CFR 63, Subpart ZZZZ, Table 4, Item 1.a.]
    - 1. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and [40 CFR 63, Subpart ZZZZ, Table 4 Item 1.a.i.]
      - A. For CO, O<sub>2</sub>, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of section 11.1.1 of Method 1 of 40 CFR 60 appendix A-1, the duct may be sampled at '3-point long line'; otherwise conduct the stratification testing and select sampling points according to section 8.1.2 of Method 7E of 40 CFR 60 Appendix A-4. [40 CFR 63, Subpart ZZZZ, Table 4 Item 1.a.i.(a)]
    - 2. Measure the O<sub>2</sub> at the inlet and outlet of the control device, using Method 3 or 3A or 3B of 40 CFR 63, Appendix A-2, or ASTM D6522-00 (heated probe not

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

necessary), at the same time as the measurements for CO concentration; and [40 CFR 63, Subpart ZZZZ, Table 4 Item 1.a.ii.(1)]

3. Measure the CO at the inlet and the outlet of the control device, using ASTM D6522-00 (heated probe not necessary) or Method 10 of 40 CFR 60 Appendix A-4. The CO concentration must be at 15 percent O<sub>2</sub>, dry basis; and [40 CFR 63, Subpart ZZZZ, Table 4, Item 1.a.iii.(2)(c)]
  4. Measure moisture content at the inlet and outlet of the control device as needed to determine CO and O<sub>2</sub> concentrations on a dry basis, using Method 4 of 40 CFR 60 Appendix A-3, or Method 320 of 40 CFR 63, Appendix A, or ASTM D6348-03. Measurements to determine moisture content must be made at the same time and location as measurements for CO concentration. [40 CFR 63, Subpart ZZZZ, Table 4 Item 1.a.iv.(3)(d)]
- ii. To comply with the requirement to limit the concentration of formaldehyde or CO in the stationary RICE exhaust, the permittee must: [40 CFR 63, Subpart ZZZZ, Table 4, Item 3.a.]
1. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary RICE; and [40 CFR 63, Subpart ZZZZ, Table 4, Item 3.a.i.]
    - A. For formaldehyde, CO, O<sub>2</sub>, and moisture measurements, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3- point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of section 11.1.1 of Method 1 of 40 CFR 60 appendix A-1, the duct may be sampled at '3-point long line'; otherwise conduct the stratification testing and select sampling points according to section 8.1.2 of Method 7E of 40 CFR 60 Appendix A-4. [40 CFR 63, Subpart ZZZZ, Table 4 Item 3.a.i.(a)]
  2. Determine the O<sub>2</sub> concentration of the stationary RICE exhaust at the sampling port location, using Method 3 or 3A or 3B of 40 CFR 60 Appendix A-2, or ASTM D6522-00 (heated probe not necessary). Measurements to determine O<sub>2</sub> concentration must be made at the same time and location as the measurements for formaldehyde or CO concentration; and [40 CFR 63, Subpart ZZZZ, Table 4 Item 3.a.ii.(1)(b)]
  3. Measure moisture content of the stationary RICE exhaust at the sampling port location as needed to determine formaldehyde or CO and O<sub>2</sub> concentrations on a dry basis using Method 4 of 40 CFR 60 Appendix A-3, or method 320 of 40 CFR 63 Appendix A, or ASTM D6348-03. Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration; and [40 CFR 63, Subpart ZZZZ, Table 4 Item 3.a.iii.(2)(c)]

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4. Measure formaldehyde at the exhaust of the stationary RICE, using Method 320 or 323 of 40 CFR 63 Appendix A; or ASTM D6348-03, provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130. Formaldehyde concentration must be at 15 percent O<sub>2</sub>, dry basis. Results of this test consist of the average of three 1-hour or longer runs; or [40 CFR 63, Subpart ZZZZ, Table 4 Item 3.a.iv.(3)(d)]
5. Measure CO at the exhaust of the stationary RICE, using method 10 of 40 CFR 60 Appendix A-4, ASTM D6522-00, Method 320 of 40 CFR 63 Appendix A, or ASTM D6348-03. CO concentration must be at 15 percent O<sub>2</sub>, dry basis. Results of this test consist of the average of the three 1-hour or longer runs. [40 CFR 63, Subpart ZZZZ, Table 4, Item 3.a.v.(4)(e)]
- h. The permittee must conduct three separate test runs for each performance test required under 40 CFR 63.6620, as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour unless otherwise specified in 40 CFR 63, Subpart ZZZZ. [40 CFR 63.6620(d)]
- i. The permittee must use Equation 1 of 40 CFR 63.6620 to determine compliance with the percent reduction requirement. [40 CFR 63.6620(e)(1)]

$$\frac{C_i - C_o}{C_i} \times 100 = R \text{ [Eq. 1]}$$

Where:

C<sub>i</sub>= concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet

C<sub>o</sub>= concentration of CO, THC, or formaldehyde at the control device outlet, and

R= Percent reduction of CO, THC, or formaldehyde emissions.

- j. The permittee must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO<sub>2</sub>). If pollutant concentrations are to be corrected to 15 percent oxygen and CO<sub>2</sub> concentration is measured in lieu of oxygen concentration measurement, a CO<sub>2</sub> correction factor is needed. Calculate the CO<sub>2</sub> correction factor as described in 40 CFR 63.6620(e)(2)(i) through (iii). [40 CFR 63.6620(e)(2)]
- i. Calculate the fuel-specific F<sub>o</sub> value for the fuel burned during the test using values obtained from Method 19, Section 5.2 and the following equation: [40 CFR 63.6620(e)(2)(i)]

$$F_o = \frac{0.209F_d}{F_c} \text{ [Eq. 2]}$$

Where:

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

$F_O$ = Fuel factor based on the ratio of oxygen volume to the ultimate CO<sub>2</sub> volume produced by the fuel at zero percent excess air.

0.209= fraction of air that is oxygen, percent/100

$F_d$ = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup>/J (dscf/10<sup>6</sup> Btu)

$F_C$ = Ratio of the volume of CO<sub>2</sub> produced to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup>/J (dscf/10<sup>6</sup> Btu)

- ii. Calculate the CO<sub>2</sub> correction factor for correcting measurement data to 15 percent O<sub>2</sub>, as follows: [40 CFR 63.6620(e)(2)(ii)]

$$X_{CO_2} = \frac{5.9}{F_O} [Eq. 3]$$

Where:

$X_{CO_2}$ = CO<sub>2</sub> correction factor, percent

5.9= 20.9 percent O<sub>2</sub> – 15 percent O<sub>2</sub>, the defined O<sub>2</sub> correction value, percent

- iii. Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O<sub>2</sub> using CO<sub>2</sub> as follows: [40 CFR 63.6620(e)(2)(iii)]

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} [Eq. 4]$$

Where:

$C_{adj}$ = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O<sub>2</sub>

$C_d$ = Measured concentration of CO, THC, or formaldehyde, uncorrected.

- k. The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. [40 CFR 63.6620(i)]
- l. During the initial performance test the permittee must establish each operating limitation in 40 CFR 63, Subpart ZZZZ Tables 1b and 2b that are applicable. [40 CFR 63.6630(b)]

### 4. Specific Monitoring Requirements:

- a. The permittee must install, operate, and maintain a continuous parameter monitoring system (CPMS) according to the requirements in 40 CFR 63.6625(b)(1) through (6). [40 CFR 63.6625(b)]

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

- i. The permittee must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outline in 40 CFR 63.6625(b)(1)(i) through (v) and in 40 CFR 63.8(d). As specified in 40 CFR 63.8(f)(4), the permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in 40 CFR 63.6625(b)(1) through (5) in the site-specific monitoring plan. [40 CFR 63.6625(b)(1)]
  1. The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations; [40 CFR 63.6625(b)(1)(i)]
  2. Sampling interface (*e.g.*, thermocouple) location such that the monitoring system will provide representative measurements; [40 CFR 63.6625(b)(1)(ii)]
  3. Equipment performance evaluations, system accuracy audits, or other audit procedures. [40 CFR 63.6625(b)(1)(iii)]
  4. Ongoing operation and maintenance procedures in accordance with provisions in 40 CFR 63.8(c)(1)(ii) and (c)(3); and [40 CFR 63.6625(b)(1)(iv)]
  5. Ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR 63.10(c), (e)(1), and (e)(2)(i). [40 CFR 63.6625(b)(1)(v)]
- ii. The permittee must install, operate, and maintain each CPMS in continuous operation according to the procedures in the site-specific monitoring plan. [40 CFR 63.6625(b)(2)]
- iii. The CPMS must collect data at least once every 15 minutes. [40 CFR 63.6625(b)(3)]
- iv. For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger. [40 CFR 63.6625(b)(4)]
- v. The permittee must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually. [40 CFR 63.6625(b)(5)]
- vi. The permittee must conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan. [40 CFR 63.6625(b)(6)]
- b. The permittee must collect the catalyst inlet temperature data according to 40 CFR 63.6625(b), reduce this data to 4-hour rolling averages; and maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature. [40 CFR 63, Table 6, 1.a.iii-iv and 7.a.iii-iv]
- c. Except for monitor malfunctions associated repairs, required performance evaluations, and required quality assurance or control activities, the permittee must monitor continuously at

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

all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 CFR 63.6635(b)]

- d. The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The permittee must, however, use all the valid data collected during all other periods. [40 CFR 63.6635(c)]
- e. The permittee must measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the limitation established during the performance test. [40 CFR 63, Subpart ZZZZ, Table 6, 1.a.v and 7.a.v.]
- f. The permittee must monitor the amount of natural gas combusted, in MMscf, and the number of startups and shutdowns on a monthly basis. [401 KAR 52:020, Section 10]
- g. The permittee shall monitor engine exhaust temperatures at the inlet for each SCR and OxCat controls at least once per 15 minutes during all periods of operation. If the inlet temperature is outside of the range identified in the manufacturer's specifications or established in the most recent performance test, the permittee shall take corrective action. [401 KAR 52:020, Section 10]
- h. The permittee shall monitor the reagent flow rate to the SCR on a daily basis. [401 KAR 52:020, Section 10]
- i. The permittee shall monitor the pressure drop across the OxCat control at least once per 15 minutes during all periods of operation. If the pressure drop differs from the manufacturer's specifications or the acceptable range established in the most recent performance test, the OxCat control shall be inspected, cleaned, repaired, or replaced as necessary. [401 KAR 52:020, Section 10]

**5. Specific Recordkeeping Requirements:**

- a. The permittee must keep a maintenance plan and records of conducted maintenance. [40 CFR 60.4243(b)(2)(ii)]
- b. The permittee must keep records of the information in 40 CFR 60.4245(a)(1) through (4) [40 CFR 60.4245(a)]
  - i. All notifications submitted to comply with 40 CFR 60, Subpart JJJJ, and all documentation supporting any notification. [40 CFR 60.4245(a)(1)]
  - ii. Maintenance conducted on the engine. [40 CFR 60.4245(a)(2)]
  - iii. Documentation that the engine meets the emission standards. [40 CFR 60.4245(a)(4)]
- c. Any records required to be maintained by 40 CFR 60, Subpart JJJJ that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability

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

to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation. [40 CFR 60.4245(j)]

- d. The permittee must keep the records described in 40 CFR 63.6655(a)(1) through (5), b(1) through (3), and (c). [40 CFR 63.6655(a)]
  - i. A copy of each notification and report that the permittee submitted to comply with 40 CFR 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted according to the requirement in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.6655(a)(1)]
  - ii. Records of the occurrence and duration (in hours) of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(2)]
  - iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.6655(a)(3)]
  - iv. Records of all required maintenance performance on the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(4)]
  - v. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]
- e. For each CPMS, the permittee must keep the records listed in 40 CFR 63.6655(b)(1) through (3). [40 CFR 63.6655(b)]
  - i. Records described in 40 CFR 63.10(b)(2)(vi) through (xi). [40 CFR 63.55(b)(1)]
  - ii. Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3). [40 CFR 63.6655(b)(2)]
  - iii. Requests for alternatives to the relative accuracy test for CPMS as required in 40 CFR 63.8(f)(6)(i), if applicable. [40 CFR 63.6655(b)(3)]
- f. The permittee must keep the records required in 40 CFR 63, Subpart ZZZZ, Table 6, to show continuous compliance with each emission or operating limitation that is applicable. [40 CFR 63.6655(d)]
- g. Records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(a)]
- h. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.6660(b)]



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

- i. The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(c)]
- j. The permittee must maintain records of the amount of natural gas combusted, in MMscf, and the number of startups and shutdowns on a monthly basis. [401 KAR 52:020, Section 10]
- k. The permittee shall maintain a copy of the GCOP plan as well as any revisions. [401 KAR 52:020, Section 10]
- l. The permittee shall maintain records of the minimum and maximum engine exhaust temperatures at the inlet for each SCR and OxCat controls on a daily basis. The records shall include any time the inlet temperature was outside of the range identified in the manufacturer's specifications or established in the most recent performance test and any corrective action taken. During these times, the permittee shall assume a NO<sub>x</sub> (for the SCR) or CO and VOC (for the OxCat) control efficiency of zero percent. [401 KAR 52:020, Section 10]
- m. The permittee shall maintain records of the pressure drop across the OxCat control. The records shall include any time the pressure drop differs from the manufacturer's specifications or the acceptable range established in the most recent performance test and any corrective actions taken. During these time, the permittee shall assume a CO and VOC control efficiency of zero percent. [401 KAR 52:020, Section 10]
- n. The permittee shall maintain records of maintenance performed on the SCR and OxCat controls. [401 KAR 52:020, Section 10]

**6. Specific Reporting Requirements:**

- a. The permittee must submit an initial notification as required in 40 CFR 60.7(a)(1). The notification must include the information in paragraphs 40 CFR 60.4245(c)(1) through (5). Submit the notification electronically according to 40 CFR 60.4245(g). [40 CFR 60.4245(c)]
  - i. Name and address of the permittee; [40 CFR 60.4245(c)(1)]
  - ii. The address of the affected source.; [40 CFR 60.4245(c)(2)]
  - iii. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement; [40 CFR 60.4245(c)(3)]
  - iv. Emission control equipment; and [40 CFR 60.4245(c)(4)]
  - v. Fuel used. [40 CFR 60.4245(c)(5)]
- b. The permittee must submit a copy of each performance test as conducted in 40 CFR 60.4244 within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference – see

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

40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in annexes 1-7. Performance tests must be reported electronically according to 40 CFR 60.4245(f). [40 CFR 60.4245(d)]

- c. Within 60 days after the date of completing each performance test, the permittee must submit the results following the procedures specified in 40 CFR 60.4245(g). Data collected using test methods that are supported by EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website at the time of the test must be submitted in the file format generated using the EPA's ERT. Alternatively, the permittee may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test must be included as an attachment in the ERT or an alternate electronic file. [40 CFR 60.4245(f)]
- d. The permittee must submit notifications or reports to the EPA via the Compliance and Emission Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX). The EPA will make all the information submitted through CEDRI available to the public without further notice to the permittee. Do not use CEDRI to submit information claimed as CBI. Although the EPA does not expect persons to assert a claim of CBI, if the permittee wishes to assert a CBI claim for some of the information in the report or notification, the permittee must submit a complete file in the format specified in 40 CFR 60, Subpart JJJJ, including information claimed to be CBI, to the EPA following the procedures in 40 CFR 60.4245(g)(1) and (2). Clearly mark the part or all of the information that the permittee claims to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR Part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. The permittee must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described earlier in 40 CFR 60.4245(g). [40 CFR 60.4245(g)]
- i. The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov), and as described in 40 CFR 60.4245(g), should include clear CBI markings. ERT files should be flagged to the attention of the Group Leader, Measurement Policy Group; all other files should be flagged to the attention of the Stationary Spark Ignition Internal Combustion Engine Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if the permittee does not have their own file sharing service, please email [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov) to request a file transfer link. [40 CFR 60.4245(g)(2)]

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

- ii. If the permittee cannot transmit the file electronically, the permittee may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, 109 T.W. Alexander Drive, P.O. Box 12055, Research Triangle Park, North Carolina 27711. ERT Files should be sent to the attention of the Group Leader, Measurement Policy Group, and all other files should be sent to the attention of the Stationary Spark Ignition Internal Combustion Engine Sector Lead. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope. [40 CFR 60.4245(g)(2)]
- e. If the permittee is required to electronically submit a report through CEDRI in the EPA's CDX, the permittee may submit a claim of EPA system outage for failure to comply with that reporting requirement. To assert a claim of EPA system outage, the permittee must meet the requirements outlined in 40 CFR 60.4245(h)(1) through (7). [40 CFR 60.4245(h)]
  - i. The permittee must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems. [40 CFR 60.4245(h)(1)]
  - ii. The outage must have occurred within the period of time beginning five business days prior to the date that submission is due. [40 CFR 60.4245(h)(2)]
  - iii. The outage may be planned or unplanned. [40 CFR 60.4245(h)(3)]
  - iv. The permittee must submit notification to the Administrator in writing as soon as possible following the date the permittee first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting. [40 CFR 60.4245(h)(4)]
  - v. The permittee must provide to the Administrator a written description identifying: [40 CFR 60.4245(h)(5)]
    - 1. The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable. [40 CFR 60.4245(h)(5)(i)]
    - 2. A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage; [40 CFR 60.4245(h)(5)(ii)]
    - 3. A description of measures taken or to be taken to minimize the delay in reporting; and [40 CFR 60.4245(h)(5)(iii)]
    - 4. The date by which the permittee proposes to report, or if the permittee has already met the reporting requirement at the time of the notification, the date the permittee reported. [40 CFR 60.4245(h)(5)(iv)]

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

- vi. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator. [40 CFR 60.4245(h)(6)]
- vii. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. [40 CFR 60.4245(h)(7)]
- f. If the permittee is required to electronically submit a report through CEDRI in the EPA's CDX, the permittee may assert a claim of force majeure for failure to timely comply with that reporting requirement. To assert a claim of force majeure, the permittee must meet the requirements outline in 40 CFR 60.4245(i)(1) through (5). [40 CFR 60.4245(i)]
  - i. The permittee may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the permittee from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.*, hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.*, large scale power outage). [40 CFR 60.4245(i)(1)]
  - ii. The permittee must submit notification to the Administrator in writing as soon as possible following the date the permittee first knew, or through due diligence, should have known, that the event may cause or has caused a delay in reporting. [40 CFR 60.4245(i)(2)]
  - iii. The permittee must provide to the Administrator: [40 CFR 60.4245(i)(3)]
    - 1. A written description of the force majeure event; [40 CFR 60.4245(i)(3)(i)]
    - 2. A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; [40 CFR 60.4245(i)(3)(ii)]
    - 3. A description of measures taken or to be taken to minimize the delay in reporting; [40 CFR 60.4245(i)(3)(iii)]
    - 4. The date by which the permittee proposes to report, or if the permittee has already met the reporting requirement at the time of notification, the date the permittee reported. [40 CFR 60.4245(i)(3)(iv)]
  - iv. The decision to accept the claim of force majeure and allow for an extension to the reporting deadline is solely within the discretion of the Administrator. [40 CFR 60.4245(i)(4)]

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

- v. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. [40 CFR 60.4245(i)(5)]
- g. The engine percent load during a performance test must be determined by documenting the calculations, assumptions and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meter, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided. [40 CFR 63.6620(i)]
- h. Within 60 days after the date of completing each performance test required by 40 CFR 63, Subpart ZZZZ, the permittee must submit the results of the performance test following the procedure specified in 40 CFR 63.9(k). Data collected using test methods supported by EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website at the time of the test must be submitted in a file format generated using the EPA's ERT. Alternatively, the permittee may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test must be included as an attachment in the ERT or alternate electronic file. [40 CFR 63.6620(j)]
- i. The permittee must report each instance in which the emission limitation or operating limitation in 40 CFR 63, Subpart ZZZZ Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d that are applicable are not met. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.6650. If the permittee changes the catalyst, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee must also conduct a performance test that the required emission limitation applicable to the stationary RICE is being met. [40 CFR 63.6640(b)]
- j. The permittee must report each instance in which the applicable requirements in 40 CFR 63, Subpart ZZZZ, Table 8 are not met. [40 CFR 63.6640(e)]
- k. The permittee must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that are applicable by the dates specified. [40 CFR 63.6645(a) and 63.6645(a)(4)]
- l. The permittee must submit an initial notification not later than 120 days after becoming subject to 40 CFR 63, Subpart ZZZZ. The notification must be submitted electronically in PDF consistent with 40 CFR 63.9(k). [40 CFR 63.6645(c)]

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

- m. The permittee must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as is required in 40 CFR 63.7(b)(1). [40 CFR 63.6645(g)]
- n. For a performance test or other initial compliance demonstration as specified in 40 CFR 63, Subpart ZZZZ, Tables 4 and 5, the permittee must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). [40 CFR 63.6645(h)]
  - i. For each initial compliance demonstration required in 40 CFR 63, Subpart ZZZZ, Table 5 that does not include a performance test, the permittee must submit the Notification of Compliance Status before the close of business on the 30<sup>th</sup> day following the completion of the initial compliance demonstration. [40 CFR 63.6645(h)(1)]
  - ii. For each initial compliance demonstration required in 40 CFR 63, Subpart ZZZZ, Table 5 that includes a performance test conducted according to the requirements in 40 CFR 63, Subpart ZZZZ, Table 3 the permittee must submit the Notification of Compliance Status, including a summary of the performance test results, in PDF to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), before the close of business on the 60<sup>th</sup> day following the completion of the performance test following the procedure specified in 40 CFR 63.9(k), except any Confidential Business Information (CBI) is to be submitted according to 40 CFR 63.6645(h)(2)(i) and (ii). Do not use CEDRI to submit information the permittee claims as CBI. Although the EPA does not expect persons to make a claim of CBI, if the permittee wishes to assert a CBI claim for some of the information in the report, the permittee must submit a complete file, including the information claimed to be CBI, to the EPA following the procedures in 40 CFR 63.6645(h)(2)(i) and (ii). Clearly mark the part or all of the information that the permittee claims to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. The permittee must submit the same file submitted to the CBI office with the CBI omitted to the PEA via the EPA's CDX as described in 40 CFR 63.6645(h)(2). [40 CFR 63.6645(h)(2)]
- o. The permittee must submit each report in 40 CFR 63, Subpart ZZZZ, Table 7 that applies. [40 CFR 63.6650(a)]
  - i. The permittee must submit a compliance report. If there are no deviations from any emission limitations or operating limitations that apply, the report must contain a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were not period during which the CPMS was out-of-control during the reporting period,

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

- submitted semiannually according to the requirements in 40 CFR 63.6650(b)(1) through (5); or [40 CFR 63, Subpart ZZZZ, Table 7, 1.a]
- ii. If the permittee had a deviation from any emission limitation or operating limitation during the reporting period, the permittee shall submit a report containing the information specified in 40 CFR 63.6650(d). If there were periods during which the CPMS was out-of-control, as specified in 40 CFR 63.8(c)(7), the report must contain the information specified in 40 CFR 63.6650(e), submitted semiannually according to the requirements in 40 CFR 63.6650(b) and (i); or [40 CFR 63, Subpart ZZZZ, Table 7, 1.b.]
  - iii. If the permittee had a malfunction during the period, the report must contain the information specified in 40 CFR 63.6650(c)(4), submitted semiannually according to the requirements in 40 CFR 63.6650(b) and (i). [40 CFR 63, Subpart ZZZZ, Table 7, 1.c.]
- p. Unless the Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report by the date in 40 CFR 63, Subpart ZZZZ, Table 7 and according to the requirements of 40 CFR 63.6650(b)(1) through (9). [40 CFR 63.6650(b)]
- i. For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR Part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in 40 CFR 63.6650(b)(1) through (b)(4). [40 CFR 63.6650(b)(5)]
- q. The Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (8). [40 CFR 63.6650(c)]
- i. Company name and address. [40 CFR 63.6650(c)(1)]
  - ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [40 CFR 63.6650(c)(2)]
  - iii. Date of report and beginning and ending dates of the reporting period. [40 CFR 63.6650(c)(3)]
  - iv. If the permittee had a malfunction during the reporting period, the compliance report must include the starting and ending date and time, the duration (in hours) and a brief description for each malfunction which occurred during the reporting period which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction. [40 CFR 63.6650(c)(4)]

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

- v. If there are no deviations from any emission or operating limitations that are applicable, a statement that there were no deviations from the emission or operating limitations during the reporting period. [40 CFR 63.6650(c)(5)]
- vi. If there were no periods during which the CPMS was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period. [40 CFR 63.6650(c)(6)]
- vii. Engine site rating in brake HP, year construction of the engine commenced (as defined in 40 CFR 63.2, where the exact year is not known, provide the best estimate), and type of engine (CI, SI 2SLB, SI 4SLB, or SI 4SRB). [40 CFR 63.6650(c)(7)]
- viii. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place. [40 CFR 63.6650(c)(8)]
- r. For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in 40 CFR 63, Subpart ZZZZ, the permittee must include information in 40 CFR 63.6650(c)(1) through (8) and 63.6650(e)(1) through (13). [40 CFR 63.6650(e)]
  - i. The date and time that each malfunction started and stopped. [40 CFR 63.6650(e)(1)]
  - ii. The start and end date and time and the duration (in hours) that each CMS was inoperative, except for zero (low-level) and high-level checks. [40 CFR 63.6650(e)(2)]
  - iii. The start and end date and time and the duration (in hours) that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8). [40 CFR 63.6650(e)(3)]
  - iv. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period. [40 CFR 63.6650(e)(4)]
  - v. A summary of the total duration (in hours) of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period. [40 CFR 63.6650(e)(5)]
  - vi. A breakdown of the total duration (in hours) of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes. [40 CFR 63.6650(e)(6)]
  - vii. A summary of the total duration (in hours) of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period. [40 CFR 63.6650(e)(7)]
  - viii. An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE. [40 CFR 63.6650(e)(8)]



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

- ix. A brief description of the CMS. [40 CFR 63.6650(e)(10)]
- x. The date of the latest CMS certification or audit. [40 CFR 63.6650(e)(11)]
- xi. A description of any changes in CMS, processes, or controls since the last reporting period. [40 CFR 63.6650(e)(12)]
- xii. The total operating time of the stationary RICE at which the deviation occurred during the reporting period. [40 CFR 63.6650(e)(13)]
- s. The permittee must report all deviations as defined in 40 CFR 63, Subpart ZZZZ in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to 40 CFR 63, Subpart ZZZZ, Table 7 along with, or as part of, the semiannual monitoring report required by 40 CR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation the affected source may have to report deviations from permit requirements to the permit authority. The semiannual and annual compliance report required in 40 CFR 63, Subpart ZZZZ Table 7 must be submitted according to 40 CFR 63.6650(i). Only those elements required under this subpart are required to be submitted according to 40 CFR 63.6650(i). [40 CFR 63.6650(f)]
- t. The permittee shall submit all semiannual or annual compliance reports using the appropriate electronic report template on the CEDRI website for 40 CFR 63, Subpart ZZZZ and following the procedure specified in 40 CFR 63.9(k), except any CBI must be submitted according to the procedures in 40 CFR 63.6645(h). The date report templates become available will be listed on the CEDRI website. Unless the Administrator or delegated state agency or other authority has approved a different schedule for submission of reports, the report must be submitted by the deadline specified in 40 CFR 63, Subpart ZZZZ, regardless of the method in which the report is submitted. [40 CFR 63.6650(i)]
- u. The permittee shall include, in the semi-annual report: [401 KAR 52:020, Section 10]
  - i. Any time that the engines were not operated according to the GCOP plan with a description of the situation and actions taken to remedy the issue.
  - ii. Any instance in which the inlet gas temperature of an SCR or OxCat control was outside of the acceptable range as established in the manufacturer's specifications or the most recent performance test and any corrective actions taken.
  - iii. Any instance the pressure drop across the OxCat control differed from manufacturer's specifications or the acceptable range established in the most recent performance test and any corrective actions taken.
- v. See **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general reporting requirements

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

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

The permittee must comply with the operating limitations of 40 CFR 63, Subpart ZZZZ Table 2b which are applicable. [40 CFR 63.6600(b)]

- a. The permittee must meet the following operating limitations, except during periods of startup: [40 CFR 63, Subpart ZZZZ, Table 2b]
  - i. Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and [40 CFR 63, Subpart ZZZZ, Table 2b.1.a.]
  - ii. Maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. [40 CFR 63, Subpart ZZZZ, Table 2b.1.b.]

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

### **Emission Unit 05      Dew Point Heater**

#### **Description:**

Equipment: Dew Point Heater

Fuel Input Capacity: 1 MMBtu/hr

Construction Commenced: Proposed June 2025

Primary Fuel: Natural Gas

#### **APPLICABLE REGULATIONS:**

**401 KAR 63:005, Section 2(4)(iii)**, 40 CFR 63.7480 through 63.7575, Tables 1 through 15 (**Subpart DDDDD**), *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*

**401 KAR 59:010**, *New process operations*

#### **1. Operating Limitations:**

- a. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. 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. [40 CFR 63.7500(a)(3)]
- b. The permittee must conduct each 5-year performance tune-up according to 40 CFR 63.7540(a)(12). Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. The first 5-year tune-up must be no later than 61 months after the initial startup of the affected source. [40 CFR 63.7515(d)]
- c. The permittee must conduct a tune-up of the process heater every 5 years as specified in 40 CFR 63.7540(a)(10)(i) through (vi). The permittee may delay the burner inspection specified in 40 CFR 63.7540(a)(10)(i) until the next scheduled or unscheduled shutdown, but the permittee must inspect each burner at least once every 72 months. [40 CFR 63.7540(a)(12)]
  - i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown); [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 calibrate and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). [40 CFR 63.7540(a)(10)(iii)]

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

- iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available. [40 CFR 63.7540(a)(10)(iv)]
- v. Measure the concentration 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). [40 CFR 63.7540(a)(10)(v)]

**2. Emission Limitations:**

- a. The permittee shall not 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 20 percent opacity. [401 KAR 59:010, Section 3(1)(a)]

**Compliance Demonstration Method:**

See 4. **Specific Monitoring Requirements** b. and 5. **Recordkeeping Requirements** b.

- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter in excess of: [40 CFR 59:010, Section 3(2)]

<b>P= Process Weight Rate (Tons/hr)</b>	<b>E= PM Emission Limit (lb/hr)</b>
$P \leq 0.50$	$E = 2.34$
$0.50 < P \leq 30$	$E = 3.59 P^{0.62}$

**Compliance Demonstration Method:**

Compliance is assumed based on the emission factors and controls submitted in the application.

**3. Testing Requirements:**

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

**4. Specific Monitoring Requirements:**

- a. The permittee shall monitor the amount of natural gas combusted (in MMscf) on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall perform a qualitative visual observation of the opacity at the stack no less than once every 7 calendar days while the affected facility is operating. If visible emissions from the stacks are observed (not including condensed water in the plume), the permittee shall determine the opacity using US EPA Reference Method 9. In lieu of determining the opacity using US EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Specific Recordkeeping Requirements:**

- a. The permittee shall maintain records of natural gas combusted (in MMscf), on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain a log of qualitative visual made as specified in **4. Specific Monitoring Requirements** b. including the date, time, initials of observer, whether any emissions were observed (yes/no), and any US EPA Reference Method 9 readings taken. [401 KAR 52:020, Section 10]
- c. The permittee must 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)]
  - i. 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)]
  - ii. A description of any corrective actions taken as apart of the tune-up; and [40 CFR 63.7540(a)(10)(vi)(B)]
- d. The permittee must submit to the Administrator all of the notification in 40 CFR 63.7(b and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that are applicable by the dates specified. [40 CFR 63.7545(a)]
- e. The permittee must keep a copy of each notification and report that is submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or compliance report submitted according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]
- f. The permittee must keep records in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). [40 CFR 63.7560(a)]
- g. The permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.7560(b)]
- h. The permittee must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 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 3 years/ [40 CFR 63.7560(c)]

**6. Specific Reporting Requirements:**

- a. The permittee must submit a 5-year compliance report, as specified in 40 CFR 63.7550(b)(1) through (4). [40 CFR 63.7550(b)]

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

- i. The first compliance must cover the period beginning on the compliance date that is specified in 40 CFR 63.7495 and ending on December 31 within 5 years after the compliance date that is specified. [40 CFR 63.7550(b)(1)]
- ii. The first report must be postmarked or submitted no later than January 31. [40 CFR 63.7550(b)(2)]
- iii. Each subsequent 5-year compliance report must cover the 5-year reporting period from January 1 to December 31. [40 CFR 63.7550(b)(3)]
- iv. Each subsequent 5-year report must be postmarked or submitted no later than January 31. [40 CFR 63.7550(b)(4)]
- b. The permittee must submit a compliance report with the information specified in 40 CFR 63.7550(c)(i) through (iii), (xiv) and (xvii). [40 CFR 63.7550(c)(1)]
  - i. Company and Facility name and address. [40 CFR 63.7550(c)(5)(i)]
  - ii. Process and unit information, emissions limitations, and operating parameter limitations. [40 CFR 63.7550(c)(5)(ii)]
  - iii. Date of report and beginning and ending dates of the reporting period. [40 CFR 63.7550(c)(5)(iii)]
  - iv. Include the date of the most recent tune-up for the unit. Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. [40 CFR 63.7550(c)(5)(xiv)]
  - v. 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)]
- c. The permittee must submit all reports required by 40 CFR, Subpart DDDDD, Table 9 electronically to the EPA via the CEDRI. (CEDRI can be accessed through EPA's CDX) The permittee must use the appropriate electronic report in CEDRI for 40 CFR 63, Subpart DDDDD. Instead of using the electronic report in CEDRI for 40 CFR 63, Subpart DDDDD, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI website, once the CML schema is available. If the reporting form specific to 40 CFR 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]
- d. See **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general reporting 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. 0.02 MMBtu/hr Water Heater	401 KAR 63:020
2. Circuit Breakers/Switch Gears (200 lb)	N/A
3. Space Heaters (14 total, 1.35 MMBtu/hr combined heat capacity)	401 KAR 63:020
4. 2700 gal Maintenance Water (Water-Glycol) Tank	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. CO, NO<sub>x</sub>, and VOC 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. To preclude the requirements of 401 KAR 51:017, source wide CO emissions shall not exceed 225 tons on a 12-month rolling total basis.

### Compliance Demonstration Method:

The permittee shall calculate CO emissions on a monthly basis and maintain a 12-month rolling total of source-wide CO emissions. CO emissions shall be calculated according to the following equations:

$$Total\ CO\ \left(\frac{tons}{month}\right) = CO_{Startup/Shutdown} + CO_{Steady\ State} + CO_{Other} + CO_{IA}$$

$$CO_{Startup/Shutdown}\ \left(\frac{tons}{months}\right) = \frac{EF\ \left(\frac{lb}{30\ min}\right) \times St(30\ mins) + EF\ \left(\frac{lb}{30\ min}\right) \times Sd(30\ mins)}{2000\ \frac{lb}{ton}}$$

Where:

CO<sub>Startup/Shutdown</sub> = Monthly emissions of CO from engine startups and shutdowns, tons/month

EF = Approved emission factor, 13 lb/30 minutes for startups, 2.55 lb/30 minutes for shutdowns

St = Number of engine startups per month, measured in 30 minute intervals

Sd = Number of engine shutdowns per month, measured in 30 minute intervals

$$CO_{Steady\ State}\ \left(\frac{tons}{month}\right) = Fuel\ Usage\ \left(\frac{MMscf}{month}\right) \times EF\ \left(\frac{lb}{MMscf}\right) \times (1 - CE) \times \frac{1\ ton}{2000\ lbs}$$

Where:

CO<sub>Steady State</sub> = Monthly emissions of CO from engines operating under steady state conditions

Fuel Usage = Amount of natural gas combusted in each unit on a monthly basis



EF = steady state engine specific emission factor for CO, the emission factor submitted in the initial application shall be utilized until performance testing has been completed to determine a specific emission factor

CE = unit specific control efficiency, the control efficiency submitted in the initial application shall be utilized until performance testing has been completed to determine a specific control efficiency

$$CO_{Other} \left( \frac{tons}{month} \right) = Fuel\ Usage \left( \frac{MMscf}{month} \right) \times EF \left( \frac{lb}{MMscf} \right) \times (1 - CE) \times \frac{1\ ton}{2000\ lbs}$$

Where:

CO<sub>Other</sub> = Monthly emissions of CO from all other emission units

Fuel Usage = Amount of natural gas combusted in each unit on a monthly basis

EF = unit specific emission factor for CO, the emission factor submitted in the initial application shall be utilized unless performance testing has been completed to determine a specific emission factor

CE = unit specific control efficiency, the control efficiency submitted in the initial application shall be utilized unless performance testing has been completed to determine a specific control efficiency

$$CO_{IA} \left( \frac{tons}{month} \right) = \frac{Annual\ CO\ PTE\ for\ all\ insignificant\ activities}{12}$$

Where:

CO<sub>IA</sub> = monthly emissions of CO from insignificant activities

4. To preclude the requirements of 401 KAR 51:017, source wide NO<sub>x</sub> emissions shall not exceed 225 tons on a 12-month rolling total basis.

**Compliance Demonstration Method:**

The permittee shall calculate NO<sub>x</sub> emissions on a monthly basis and maintain a 12-month rolling total of source-wide NO<sub>x</sub> emissions. NO<sub>x</sub> emissions shall be calculated according to the following equation:

$$\begin{aligned} Total\ NO_x \left( \frac{tons}{month} \right) &= NO_{x\ Startup/Shutdown} + NO_{x\ Steady\ State} + NO_{x\ Other} + NO_{x\ IA} \\ NO_{x\ Startup/Shutdown} \left( \frac{tons}{months} \right) &= \frac{EF \left( \frac{lb}{30\ min} \right) \times St(30\ mins) + EF \left( \frac{lb}{30\ min} \right) \times Sd(30\ mins)}{2000 \frac{lb}{ton}} \end{aligned}$$

Where:

$NO_x \text{ Startup/Shutodwn}$  = Monthly emissions of  $NO_x$  from engine startups and shutdowns, tons/month

EF = Approved emission factor, 13.5 lb/30 minutes for startups and 1.35 lb/30 minutes for shutdowns

St = Number of engine startups per month, measured in 30 minute intervals

Sd = Number of engine shutdowns per month, measured in 30 minute intervals

$$NO_{x \text{ Steady State}} \left( \frac{\text{tons}}{\text{month}} \right) = \text{Fuel Usage} \left( \frac{\text{MMscf}}{\text{month}} \right) \times EF \left( \frac{\text{lb}}{\text{MMscf}} \right) \times (1 - CE) \times \frac{1 \text{ ton}}{2000 \text{ lbs}}$$

Where:

$NO_x \text{ Steady State}$  = Monthly emissions of  $NO_x$  from engines operating under steady state conditions

Fuel Usage = Amount of natural gas combusted in each unit on a monthly basis

EF = steady state engine specific emission factor for  $NO_x$ , the emission factor submitted in the initial application shall be utilized until performance testing has been completed to determine a specific emission factor

CE = unit specific control efficiency, the control efficiency submitted in the initial application shall be utilized until performance testing has been completed to determine a specific control efficiency

$$NO_{x \text{ Other}} \left( \frac{\text{tons}}{\text{month}} \right) = \text{Fuel Usage} \left( \frac{\text{MMscf}}{\text{month}} \right) \times EF \left( \frac{\text{lb}}{\text{MMscf}} \right) \times (1 - CE) \times \frac{1 \text{ ton}}{2000 \text{ lbs}}$$

Where:

$NO_x \text{ Other}$  = Monthly emissions of  $NO_x$  from all other emission units

Fuel Usage = Amount of natural gas combusted in each unit on a monthly basis

EF = unit specific emission factor for  $NO_x$ , the emission factor submitted in the initial application shall be utilized unless performance testing has been completed to determine a specific emission factor

CE = unit specific control efficiency, the control efficiency submitted in the initial application shall be utilized unless performance testing has been completed to determine a specific control efficiency

$$NO_{x \text{ IA}} \left( \frac{\text{tons}}{\text{month}} \right) = \frac{\text{Annual CO PTE for all insignificant activities}}{12}$$

Where:

$NO_{x\text{ IA}}$  = monthly emissions of  $NO_x$  from insignificant activities

5. To preclude the requirements of 401 KAR 51:017, source wide VOC emissions shall not exceed 225 tons on a 12-month rolling total basis.

**Compliance Demonstration Method:**

The permittee shall calculate VOC emissions on a monthly basis and maintain a 12-month rolling total of source-wide VOC emissions. VOC emissions shall be calculated according to the following equation:

$$Total\ VOC\ \left(\frac{tons}{month}\right) = VOC_{Startup/Shutdown} + VOC_{Steady\ State} + VOC_{Other} + VOC_{IA}$$

$$VOC_{Startup/Shutdown}\ \left(\frac{tons}{months}\right) = \frac{EF\ \left(\frac{lb}{30\ min}\right) \times St(30\ mins) + EF\ \left(\frac{lb}{30\ min}\right) \times Sd(30\ mins)}{2000\ \frac{lb}{ton}}$$

Where:

$VOC_{Startup/Shutdown}$  = Monthly emissions of VOC from engine startups and shutdowns, tons/month

EF = Approved emission factor, 3 lb/30 minutes for startups and 2.55 lb/30 minutes for shutdowns

St = Number of engine startups per month, measured in 30 minute intervals

Sd = Number of engine shutdowns per month, measured in 30 minute intervals

$$VOC_{Steady\ State}\ \left(\frac{tons}{month}\right) = Fuel\ Usage\ \left(\frac{MMscf}{month}\right) \times EF\ \left(\frac{lb}{MMscf}\right) \times (1 - CE) \times \frac{1\ ton}{2000\ lbs}$$

Where:

$VOC_{Steady\ State}$  = Monthly emissions of VOC from engines operating under steady state conditions

Fuel Usage = Amount of natural gas combusted in each unit on a monthly basis

EF = steady state engine specific emission factor for VOC, the emission factor submitted in the initial application shall be utilized until performance testing has been completed to determine a specific emission factor

CE = unit specific control efficiency, the control efficiency submitted in the initial application shall be utilized until performance testing has been completed to determine a specific control efficiency

$$VOC_{Other} \left( \frac{tons}{month} \right) = Fuel\ Usage \left( \frac{MMscf}{month} \right) \times EF \left( \frac{lb}{MMscf} \right) \times (1 - CE) \times \frac{1\ ton}{2000\ lbs}$$

Where:

VOC<sub>Other</sub> = Monthly emissions of VOC from all other emission units

Fuel Usage = Amount of natural gas combusted in each unit on a monthly basis

EF = unit specific emission factor for VOC, the emission factor submitted in the initial application shall be utilized unless performance testing has been completed to determine a specific emission factor

CE = unit specific control efficiency, the control efficiency submitted in the initial application shall be utilized unless performance testing has been completed to determine a specific control efficiency

$$VOC_{IA} \left( \frac{tons}{month} \right) = \frac{Annual\ CO\ PTE\ for\ all\ insignificant\ activities}{12}$$

Where:

VOC<sub>IA</sub> = monthly emissions of VOC from insignificant activities

## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

1. 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].

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

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

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

- 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  
Owensboro Regional Office  
3032 Alvey Park Dr. W Suite 700  
Owensboro, KY 42303

U.S. EPA Region 4  
Air Enforcement Branch  
Atlanta Federal Center  
61 Forsyth St. SW  
Atlanta, GA 30303-8960

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



## 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)].

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements. [Section 1a-15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3) b].
- 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.].

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
- q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
  - (1) Applicable requirements that are included and specifically identified in this permit; and
  - (2) Non-applicable requirements expressly identified in this permit.

**2. Permit Expiration and Reapplication Requirements**

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

**3. Permit Revisions**

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

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

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission units 01, 02, 03, 04, 05, 06, 07, 08, 09 in accordance with the terms and conditions of this permit.

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, notification of the following:
  - (1) The date when construction commenced.
  - (2) The date of start-up of the affected facilities listed in this permit.
  - (3) The date when the maximum production rate specified in the permit application was achieved.
- c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- d. Pursuant to 401 KAR 50:055, Section 2(1)(a), an owner or operator of any affected facility subject to any standard within the administrative regulations of the Division for Air Quality shall demonstrate compliance with the applicable standard(s) within sixty (60) days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up of such facility. Pursuant to 401 KAR 52:020, Section 3(3)(c), sources that have not demonstrated compliance within the timeframes prescribed in 401 KAR 50:055, Section 2(1)(a), shall operate the affected facility only for purposes of demonstrating compliance unless authorized under an approved compliance plan or an order of the cabinet.
- e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.
- f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

**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

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.

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

**6. Acid Rain Program Requirements**

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

**7. Emergency Provisions**

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

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

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