# 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

**Draft** 

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

Permittee Name: Darling Ingredients Inc.
Mailing Address: 4221 Alexandria Pike

Cold Spring, Kentucky 41076-1897

Source Name: Darling Ingredients Inc.
Mailing Address: 4221 Alexandria Pike

Cold Spring, Kentucky 41076-1897

Source Location: 1176 Bryan Griffin Road

**Butler, Kentucky 41006** 

Permit ID: V-25-024 Agency Interest #: 3408

Activity ID: APE20250001
Review Type: Title V, Operating
Source ID: 21-191-00007

**Regional Office:** Florence Regional Office

8020 Veterans Memorial Drive, Suite 110

Florence, KY 41042 (859) 525-4923

**County:** Pendleton

**Application** 

Complete Date: October 15, 2025

**Issuance Date: Expiration Date:** 

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

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Permit	Permit Type	Activity #	Complete Date	Issuance Date	Summary of Action
V-25-024	Renewal	APE20250001	10/15/2025		Renewal Permit and Removing EU14 & EU15

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#### **SECTION A - PERMIT AUTHORIZATION**

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

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

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

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

Emission Units 02 and 13 (EP 02 and EP 14) Indirect Heat Exchangers

**Description:** 

Primary Fuel: Natural Gas

Secondary Fuels: Processed Fats, Biodiesel and LSD

(≤0.05% Sulfur)

Emission Unit	EU 02	EU 13
Model No.	Cleaver Brooks N-193751	Cleaver Brooks 400-700/L-61633
Heat Input Capacity	33.5 MMBtu/hr	29.3 MMBtu/hr
Construction Year	1973	1976
Installation Date	July 1973	December 2017

#### **APPLICABLE REGULATION:**

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

#### **NON-APPLICABLE REGULATION:**

**401 KAR 60:005, Section 2(2)(d),** 40 CFR 60.40c through 60.48c (**Subpart Dc**), Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, as published July 1, 2016

#### **PRECLUDED REGULATION:**

401 KAR 63:002, Section 2(4)(jjjjj), 40 CFR 63.11193 through 63.11237, Tables 1 through 8 (Subpart JJJJJJ), National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers Area Sources, as published July 1, 2016

#### **STATE-ORIGIN REQUIREMENT:**

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

#### 1. Operating Limitations:

- a. To be considered a *gas-fired boiler* and preclude the applicability of 40 CFR 63, Subpart JJJJJJ, the boilers shall burn gaseous fuels not combined with any solid fuels and burn liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of forty-eight (48) hours during any calendar year. For the purposes of this condition, the following definitions, found in 40 CFR 63.11237, shall apply. [40 CFR 63.11195(e)]
  - i. Period of gas curtailment or supply interruption means a period of time during which the supply of gaseous fuel to an affected boiler is restricted or halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures

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

qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility.

#### ii. Startup means:

- A. Either the first-ever firing of fuel in a boiler for the purpose of supplying useful thermal energy (such as steam or hot water) for heating and/or producing electricity, or for any other purpose, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the useful thermal energy from the boiler is supplied for heating and/or producing electricity, or for any other purpose, or
- B. The period in which operation of a boiler is initiated for any purpose. Startup ends four (4) hours after when the boiler supplies useful thermal energy heating, cooling, or process purposes or generating electricity, whichever is earlier.
- iii. Shutdown means the period in which cessation of operation of a boiler is initiated for any purpose. Shutdown begins when the boiler no longer supplies useful thermal energy for heating, cooling, or process purposes or generates electricity, or when no fuel is being fed to the boiler, whichever is earlier. Shutdown ends when the boiler no longer supplies useful thermal energy for heating, cooling, or process purposes or generates electricity, and no fuel is being combusted in the boiler.
- b. During a startup period or a shutdown period, the permittee shall comply with the work practice standards established by the following [401 KAR 59:015, Section 7]:
  - i. The permittee shall comply with 401 KAR 50:055, Section 2(5) [401 KAR 59:015, Section 7(1)(a)];
  - ii. The frequency and duration of startup periods or shutdown periods shall be minimized by the affected facility [401 KAR 59:015, Section 7(1)(b)];
  - iii. All reasonable steps shall be taken by the permittee to minimize the impact of emissions on ambient air quality from the affected facility during startup periods and shutdown periods [401 KAR 59:015, Section 7(1)(c)];
  - iv. The actions, including duration of the startup period, of the permittee during startup periods and shutdown periods, shall be documented by signed, contemporaneous logs or other relevant evidence [401 KAR 59:015, Section 7(1)(d)]; and
  - v. Startups and shutdowns shall be conducted according to either the manufacturer's recommended procedure or recommended procedures for a unit of similar design, for which manufacturer's recommended procedures are available, as approved by the Cabinet based on documentation provided by the permittee of the affected facility [401 KAR 59:015, Section 7(1)(e)].

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

#### <u>Compliance Demonstration Method:</u>

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

#### 2. Emission Limitations:

a. Particulate matter (PM) emissions shall not exceed the following [401 KAR 59:015, Section 4(1)(c)]:

EU 02	EU 13
0.36 lbs/MMBtu	0.31 lbs/MMBtu

- b. Visible emissions shall not exceed twenty (20) percent opacity, except [401 KAR 59:015, Section 4(2)]:
  - i. A maximum of forty (40) percent opacity shall be allowed for a maximum of six (6) consecutive minutes in any sixty (60) consecutive minutes during fire box cleaning or soot blowing, [401 KAR 59:015, Section 4(2)(b)] and
  - ii. For emissions from an affected facility caused by building a new fire, emissions during the period required to bring the boiler up to operating conditions shall be allowed, if the method used is recommended by the manufacturer and the time does not exceed the manufacturer's recommendations [401 KAR 59:015, Section 4(2)(c)].

#### Compliance Demonstration Method:

These units are assumed to be in compliance with the applicable 401 KAR 59:015 PM and opacity limitations while combusting natural gas, processed fats, biodiesel, and low sulfur diesel.

c. Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed the following [401 KAR 59:015, Section 5(1)(c)1.b. and 5(1)(c)2.b.]:

	EU 02	EU 13
Primary Fuel	1.37 lbs/MMBtu	1.06 lbs/MMBtu
Secondary Fuel	1.37 lbs/MMBtu	1.04 lbs/MMBtu

#### Compliance Demonstration Method:

- A. These units are assumed to be in compliance with the applicable 401 KAR 59:015 SO<sub>2</sub> limitations while combusting natural gas.
- B. While combusting a permitted secondary fuel, compliance shall be demonstrated according to 4. Specific Monitoring Requirements a.
- d. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures

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

and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

#### Compliance Demonstration Method:

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

e. See Section D - Source Emission Limitations and Testing Requirements for source-wide VOC emission limitations.

#### 3. Testing Requirements:

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

#### 4. **Specific Monitoring Requirements:**

- a. The permittee shall monitor sulfur content (in weight percent) of any secondary fuel combusted on a monthly basis [401 KAR 52:020, Section 10].
- b. The permittee shall monitor natural gas (in scf) and each secondary fuel usage (in gallons) on a monthly basis [401 KAR 52:020, Section 10].

#### 5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the sulfur content (in weight percent) of any secondary fuel combusted in these units on a monthly basis [401 KAR 52:020, Section 10].
- b. The permittee shall maintain records of the natural gas fuel usage (in scf) and each secondary fuel usage (in gallons) on a monthly basis [401 KAR 52:020, Section 10].
- c. The permittee shall keep records of the manufacturer's recommended procedures for startup and shutdown, any instance in which the recommended procedures were not followed, and any corrective actions taken [401 KAR 52:020, Section 10].

#### 6. Specific Reporting Requirements:

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

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

**Emission Unit 04 (EP 04 and EP 05)** Rendering Process

#### **Description:**

Custom designed equipment for rendering process

Operating Capacity: 28 tons/hour Maximum Meal Yield (Solids): 5.7 tons/hour

Control Equipment: Venturi/Packed Tower Scrubber/ RTO -

Regenerative Thermal Oxidizer (VOC, H<sub>2</sub>S gases for odor control), and Room Air Scrubber (Odor Control) If RTO down for maintenance or failure, Venturi/Packed Tower Scrubber will be operated.

Construction Commenced: July 1983

#### **APPLICABLE REGULATION:**

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

#### **STATE-ORIGIN REQUIREMENT:**

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

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

N/A

#### 2. Emission Limitations:

a. The permittee shall not cause, suffer, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity [401 KAR 59:010, Section 3(1)(a)].

#### Compliance Demonstration Method:

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

b. Particulate matter emissions from the stack into the open air shall not exceed [3.59P<sup>0.62</sup>] lbs/hr., where P is the processing rate in tons/hr. If the process rate is 1,000 lbs/hr or less, then the limit on PM emissions is 2.34 lbs/hr [401 KAR 59:010, Section 3(2)].

#### Compliance Demonstration Method:

This unit is assumed to be in compliance with the applicable 401 KAR 59:010 PM limitations based on the emission factor determined from the most recent stack test approved by the Division.

c. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures

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

and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

#### <u>Compliance Demonstration Method</u>:

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

d. See Section D - Source Emission Limitations and Testing Requirements for source-wide VOC emission limitations.

#### 3. Testing Requirements:

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

#### 4. Specific Monitoring Requirements:

- a. The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a weekly basis 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 U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. 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]
- b. The permittee shall monitor the hours of operation, the amount of natural gas combusted (in MMscf), and the amount of rendering material processed (in tons) on a monthly basis [401 KAR 52:020, Section 10].

#### 5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the weekly qualitative visual observations, any U.S. EPA Reference Method 9 readings performed, and any corrective actions taken [401 KAR 52:020, Section 10].
- b. The permittee shall maintain records of the hours of operation, the amount of natural gas combusted (in MMscf), and the amount of rendering material processed (in tons) on a monthly basis [401 KAR 52:020, Section 10].
- c. Records regarding the maintenance of the Venturi/RTO, Packed Tower Scrubber, and room air scrubber shall be maintained [401 KAR 52:020, Section 10].

#### 6. Specific Reporting Requirements:

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

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

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

The Venturi/Packed Tower Scrubber/RTO and room air scrubber (for odor control) shall be operated to maintain compliance with permitted emission limitations consistent with manufacturer's specifications and standard operating practices [401 KAR 50:055].

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

Emission Unit 06 (EP 07)

**Description:** 

Heat Input Capacity:

Fuels:

Maximum Feed Rate: Construction Commenced: **Biomass Burner and Dryer** 

22.5 MMBtu/hr

Packaging Materials; Biomass, such as sawdust and peanut shells/hulls; Natural Gas

25 tons/hr August 1998

#### **APPLICABLE REGULATION:**

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

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

N/A

#### 2. Emission Limitations:

a. The permittee shall not cause, suffer, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity [401 KAR 59:010, Section 3(1)(a)].

#### **Compliance Demonstration Method:**

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

b. Particulate matter emissions from the stack into the open air shall not exceed [3.59P<sup>0.62</sup>] lbs/hr, where P is the processing rate in tons/hr. If the process rate is 1,000 lbs/hr or less, then the limit on PM emissions is 2.34 lbs/hr. [401 KAR 59:010, Section 3(2)]

#### Compliance Demonstration Method:

This unit is assumed to be in compliance with the applicable 401 KAR 59:010 PM limitations based on the emission factor determined from the most recent stack test approved by the Division.

c. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

#### Compliance Demonstration Method:

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

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

d. See Section D - Source Emission Limitations and Testing Requirements for source-wide VOC emission limitations.

#### <u>Compliance Demonstration Method for VOC Emissions:</u>

VOC Emissions (ton/month) = [VOC Emission Factor (lbs/ton)] x [Dough Containing Yeast (tons/month)] / 2000 lbs

VOC Emission Factor (lbs VOC/ton of dough containing yeast) = 0.95 Yi + 0.195 ti + 1.90 Yi = Initial Baker's Percent of Yeast

Ti = Total Yeast Action Time in Hours

Example Calculation (to be performed monthly for all processed dough containing yeast): VOC Emission Factor =  $0.95(2.3) + 0.195(49.3) + 1.90 = 13.9 \frac{\text{lbs}}{\text{ton}}$ 

$$\frac{13.9 \text{ lbs VOC}}{\text{ton dough}} \times \frac{7122 \text{ tons dough}}{\text{month}} \times \frac{\text{ton}}{2000 \text{ lbs}} = \frac{48.78 \text{ tons VOC}}{\text{month}}$$

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

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

#### 4. Specific Monitoring Requirements:

- a. The permittee shall perform a qualitative visual observation of the opacity of emissions from each control device or stack on a weekly basis 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 U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. 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]
- b. The permittee shall monitor the amount of packaging materials fuel (in tons), peanut shells/hulls (in tons), sawdust (in tons) and natural gas (in scf) combusted in the Biomass Burner on a monthly basis [401 KAR 52:020, Section 10].
- c. The permittee shall monitor the amount of bakery products processed in the dryer (in tons) and the hours of operation on a monthly basis [401 KAR 52:020, Section 10].

#### 5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the weekly qualitative visual observations, any U.S. EPA Reference Method 9 readings performed, and any corrective actions taken [401 KAR 52:020, Section 10].
- b. The permittee shall maintain records of the amount of packaging materials fuel (in tons), peanut shells/hulls (in tons), sawdust (in tons) and natural gas (in scf) combusted in the Biomass Burner on a weekly basis [401 KAR 52:020, Section 10].
- c. The permittee shall maintain records of the amount of bakery products processed in the dryer (in tons) and the hours of operation on a weekly basis [401 KAR 52:020, Section 10].

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

#### 6. Specific Reporting Requirements:

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

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

Emission Unit 07 (EP 08) Product/Blending Stock mixing, Size Reduction, and Storage

#### **Description:**

Mixing of blending stock with dried product; size reduction by vibrating screens; transfer to storage via covered screw and belt conveyors

Operating Rate: 25 tons/hr

Control: Process Enclosed Construction Commenced: August 1998

#### **APPLICABLE REGULATIONS:**

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

#### 1. Operating Limitations:

N/A

#### 2. <u>Emission Limitations</u>:

a. The permittee shall not cause, suffer, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity [401 KAR 59:010, Section 3(1)(a)].

#### <u>Compliance Demonstration Method</u>:

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

b. Particulate matter emissions from the stack into the open air shall not exceed [3.59P<sup>0.62</sup>] lbs/hr, where P is the processing rate in tons/hr. If the process rate is 1,000 lbs/hr or less, then the limit on PM emissions is 2.34 lbs/hr [401 KAR 59:010, Section 3(2)].

#### **Compliance Demonstration Method:**

This unit is assumed to be in compliance with the applicable 401 KAR 59:010 PM emission limitations.

#### 3. Testing Requirements:

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

#### 4. Specific Monitoring Requirements:

- a. The permittee shall perform a qualitative visual observation of the opacity of emissions from EP 08 on a weekly basis while the affected facility is operating. If visible emissions are observed (not including condensed water in the plume), the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. 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]
- b. The permittee shall monitor the hours of operation and the mixing and storage rate (in tons) on a monthly basis [401 KAR 52:020, Section 10].

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

#### 5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the weekly qualitative visual observations, any U.S. EPA Reference Method 9 readings performed, and any corrective actions taken [401 KAR 52:020, Section 10].
- b. The permittee shall maintain records of the hours of operation and the mixing and storage rate (in tons) on a monthly basis [401 KAR 52:020, Section 10].

#### 6. Specific Reporting Requirements:

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

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

**Emission Unit 09 (EP10)** 

**Diesel-Fired Emergency RICE** 

#### **Description:**

Cummins Model 6CTA8.3-G2, 8.3 L Total Displacement

Maximum Engine Rating: 277 HP

Construction Commenced: 2002 (Cold Springs Facility) 2011 (Moved to Butler Facility)

#### **APPLICABLE REGULATIONS:**

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

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

- a. The permittee shall comply and demonstrate continuous compliance with the following requirements from Table 2d of 40 CFR 63, Subpart ZZZZ, except during periods of startup [40 CFR 63.6603(a) and 40 CFR 63.6640(a)]:
  - i. Change oil and filter every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first;
  - ii. Inspect air cleaner every 1,000 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary; and
  - iii. Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary.
- b. The permittee shall, at all times, 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 any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]
- c. The permittee shall operate and maintain the engine according to the manufacturer's emission-related written instructions or the permittee shall develop a maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions [40 CFR 63.6625(e)(3)].
- d. The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed thirty (30) minutes [40 CFR 63.6625(h)].

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

- e. The permittee shall operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640(f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If the engine is not operated according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine and will need to meet all requirements for non-emergency engines. [40 CFR 63.6640(f)]
  - i. There is no limit on the use of emergency RICE in emergency situations [40 CFR 63.6640(f)(1)].
  - ii. The permittee may operate the emergency stationary RICE for any combination of the purpose specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by 40 CFR 63.6640(f)(2). Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission company associated with the engine. The permittee may petition the Administrator for approval of the additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standard require maintenance and testing of emergency RICE beyond 100 hours per calendar year. [40 CFR 63.6640(f)(2) and 63.6640(f)(2)(i)]
  - iii. The permittee may operate the emergency RICE for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [40 CFR 63.6640(f)(4) and 63.6640(f)(4)(ii)]
    - A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator. [40 CFR 63.6640(f)(4)(ii)(A)]
    - B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [40 CFR 63.6640(f)(4)(ii)(B)]
    - C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [40 CFR 63.6640(f)(4)(ii)(C)]

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

- D. The power is provided only to the facility itself or to support the local transmission and distribution system. [40 CFR 63.6640(f)(4)(ii)(D)]
- E. The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee. [40 CFR 63.6640(f)(4)(ii)(E)]

#### 2. Emission Limitations:

See Section D - Source Emission Limitations and Testing Requirements for source-wide VOC emission limitations.

#### 3. Testing Requirements:

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

#### 4. Specific Monitoring Requirements:

- a. The permittee shall install a non-resettable hour meter if one is not already installed [40 CFR 63.6625(f)].
- b. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil and filter change requirement. The oil analysis must be performed at the same frequency as for changing the oil and filter. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil and filter. If any of the limits are exceeded, the permittee shall change the oil and filter within two (2) business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received; the permittee shall change the oil and filter within two (2) business days or before commencing operation, whichever is later. The analysis program shall be made a part of the maintenance plan for the engine. [40 CFR 63.6625(i)]
- c. The permittee shall monitor the fuel usage (in gallons) and hours of operation on a monthly basis [401 KAR 52:020, Section 10].

#### 5. Specific Recordkeeping Requirements:

- a. If the permittee utilizes an oil analysis program, the permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine [40 CFR 63.6625(i)].
- b. The permittee shall keep records of the following [40 CFR 63.6655(a)]:

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

i. Each notification and report that the permittee submits to comply with 40 CFR 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv) [40 CFR 63.6655(a)(1)].

- ii. The occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6655(a)(2)].
- iii. Performance tests and performance evaluations as required by 40 CFR 63.10(b)(2)(viii) [40 CFR 63.6655(a)(3)].
- iv. All required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)].
- v. 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)].
- c. The permittee shall maintain records of the maintenance conducted on the engine in order to demonstrate that the engine was operated and maintained, including any after treatment control device, according to the maintenance plan for the engine [40 CFR 63.6655(e)].
- d. If an engine is not certified to the standards applicable to non-emergency engines (see Table 2d of 40 CFR 63 Subpart ZZZZ), then the permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator shall document how many hours are spent for emergency operation; including, what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for demand response, records shall be kept of the notification of the emergency situation, and the time the engine was operated as part of demand response. [40 CFR 63.6655(f)(2)]
- e. Records shall be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). As specified in 40 CFR 63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee shall 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]
- f. The permittee shall maintain records of fuel usage (in gallons) and hours of operation on a monthly basis [401 KAR 52:020, Section 10].

#### 6. Specific Reporting Requirements:

a. The permittee shall report each instance in which the operating limitations in Subsection 1 have not been met. These instances are deviations from the operating limitations and shall be reported according to the requirements in 40 CFR 63.6650. [40 CFR 63.6640(b)]

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

b. The permittee shall report each instance in which the requirements of Table 8 of 40 CFR 63, Subpart ZZZZ, as applicable, have not been met [40 CFR 63.6640(e)].

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

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

**Emission Unit 10 (EP 11)** 

#### **Indirect Heat Exchanger**

#### **Description:**

Victory Energy Boiler, Model No. F3-1500-S250

Maximum Rating: 1500 HP
Primary Fuel: Natural Gas

Secondary Fuels: Processed Fats, Biodiesel and LSD

(≤ 0.05% Sulfur)

Heat Input Capacity: 63 MMBtu/hr Construction Commenced: November 2015

#### **APPLICABLE REGULATIONS:**

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

**401 KAR 60:005, Section 2(2)(d),** 40 CFR 60.40c through 60.48c (**Subpart Dc**), Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, as published July 1, 2016

#### PRECLUDED REGULATION:

**401 KAR 63:002, Section 2(4)(jjjjj),** 40 CFR 63.11193 through 63.11237, Tables 1 through 8 (**Subpart JJJJJJ**), National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers Area Sources, as published July 1, 2016

#### **STATE-ORIGIN REQUIREMENT:**

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

#### 1. Operating Limitations:

- a. To be considered a *gas-fired boiler* and preclude the applicability of 40 CFR 63, Subpart JJJJJJ, the boilers shall burn gaseous fuels not combined with any solid fuels and burn liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of forty-eight (48) hours during any calendar year. For the purposes of this condition, the following definitions, found in 40 CFR 63.11237, shall apply: [40 CFR 63.11195(e)]
  - i. Period of gas curtailment or supply interruption means a period of time during which the supply of gaseous fuel to an affected boiler is restricted or halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility.

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

#### ii. Startup means:

- A. Either the first-ever firing of fuel in a boiler for the purpose of supplying useful thermal energy (such as steam or hot water) for heating and/or producing electricity, or for any other purpose, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the useful thermal energy from the boiler is supplied for heating and/or producing electricity, or for any other purpose, or
- B. The period in which operation of a boiler is initiated for any purpose. Startup ends four (4) hours after when the boiler supplies useful thermal energy heating, cooling, or process purposes or generating electricity, whichever is earlier.
- iii. *Shutdown* means the period in which cessation of operation of a boiler is initiated for any purpose. Shutdown begins when the boiler no longer supplies useful thermal energy for heating, cooling, or process purposes or generates electricity, or when no fuel is being fed to the boiler, whichever is earlier. Shutdown ends when the boiler no longer supplies useful thermal energy for heating, cooling, or process purposes or generates electricity, and no fuel is being combusted in the boiler.
- b. During a startup period or a shutdown period, the permittee shall comply with the work practice standards established by the following [401 KAR 59:015, Section 7]:
  - i. The permittee shall comply with 401 KAR 50:055, Section 2(5) [401 KAR 59:015, Section 7(1)(a)];
  - ii. The frequency and duration of startup periods or shutdown periods shall be minimized by the affected facility [401 KAR 59:015, Section 7(1)(b)];
  - iii. All reasonable steps shall be taken by the permittee to minimize the impact of emissions on ambient air quality from the affected facility during startup periods and shutdown periods [401 KAR 59:015, Section 7(1)(c)];
  - iv. The actions, including duration of the startup period, of the permittee during startup periods and shutdown periods, shall be documented by signed, contemporaneous logs or other relevant evidence [401 KAR 59:015, Section 7(1)(d)]; and
  - v. Startups and shutdowns shall be conducted according to either the manufacturer's recommended procedure or recommended procedures for a unit of similar design, for which manufacturer's recommended procedures are available, as approved by the Cabinet based on documentation provided by the permittee of the affected facility [401 KAR 59:015, Section 7(1)(e)].

#### **Compliance Demonstration Method:**

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

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

c. To preclude the requirement to operate a COMS under 40 CFR 60, Subpart Dc, the permittee shall burn only gaseous fuels and/or fuel oils that contain no greater than 0.5 weight percent sulfur, and operate the unit according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan shall include procedures and criteria for establishing and monitoring specific parameters for the unit indicative of compliance with the opacity standard. For testing performed as part of this site-specific monitoring plan, the permitting authority may require as an alternative to the notification and reporting requirements specified in 40 CFR 60.8 and 60.11 that the permittee submit any deviations with the excess emissions report required under 40 CFR 60.48c(c). [40 CFR 60.47c(f)(3)]

#### 2. Emission Limitations:

a. PM emission shall not exceed 0.30 lbs/MMBtu while combusting natural gas or processed fats [401 KAR 59:015, Section 4(1)(c)].

#### Compliance Demonstration Method:

This unit is assumed to be in compliance with the applicable 401 KAR 59:015 PM limitation while combusting natural gas or processed fats.

- b. Visible emissions shall not exceed twenty (20) percent opacity while combusting natural gas or processed fats, except [401 KAR 59:015, Section 4(2)]:
  - i. A maximum of forty (40) percent opacity shall be allowed for a maximum of six (6) consecutive minutes in any sixty (60) consecutive minutes during fire box cleaning or soot blowing [401 KAR 59:015, Section 4(2)(b)]; and
  - ii. For emissions caused by building a new fire, emissions during the period required to bring the boiler up to operating conditions shall be allowed, if the method used is recommended by the manufacturer and the time does not exceed the manufacturer's recommendations [401 KAR 59:015, Section 4(2)(c)].

#### Compliance Demonstration Method:

This unit is assumed to be in compliance with the applicable 401 KAR 59:015 opacity standards while combusting natural gas or processed fats.

c. SO<sub>2</sub> emissions shall not exceed 1.05 lbs/MMBtu actual heat input while combusting natural gas and 1.03 lbs/MMBtu while combusting processed fats [401 KAR 59:015, Section 5(c)].

#### Compliance Demonstration Method:

- A. This unit is assumed to be in compliance with the applicable SO2 emission standard while combusting natural gas or processed fats.
- B. While combusting processed fats, the fuel sulfur content shall remain at or below 0.50 weight percent to be considered in compliance with the applicable SO2 emission standard.
- d. At all times while combusting biodiesel or low-sulfur diesel (LSD), including periods of startup, shutdown, and malfunction, the permittee shall not cause to be discharged into the

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

atmosphere any gases that contain SO<sub>2</sub> in excess of 0.50 lbs/MMBtu heat input from oil; or, as an alternative, the permittee shall not combust oil that contains greater than 0.5 weight percent sulfur. Percent reduction requirements are not applicable. [40 CFR 60.42c(d) and 40 CFR 60.42c(i)]

#### Compliance Demonstration Method:

Compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined by either of the following:

- C. Based on a certification from the fuel supplier, as described in 40 CFR 60.48c(f) and 5. Specific Recordkeeping Requirements a. [40 CFR 60.42c(h)], or
- D. Based on shipment fuel sampling as described in **3.** <u>Testing Requirements</u> **b.** [40 CFR 60.44c(g)].
- e. While combusting biodiesel or LSD, the permittee shall not cause to be discharged into the atmosphere any gases that exhibit greater than twenty (20) percent opacity (6-minute average), except for one 6-minute period per hour of not more than twenty-seven (27) percent opacity [40 CFR 60.43c(c)].

#### Compliance Demonstration Method:

While combusting biodiesel or LSD, the permittee shall conduct performance tests, as requested by the Administrator, to determine compliance with the standards using the procedures and reference methods in 3. <u>Testing Requirements</u> c. and f. [40 CFR 60.45c(a)].

- f. While combusting biodiesel or LSD, the permittee shall not cause to be discharged into the atmosphere any gases that contain PM in excess of 0.030 lbs MMBtu heat input. If the permittee combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under 40 CFR 60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO<sub>2</sub> emissions, then the permittee shall not be subject to this PM limit. [40 CFR 60.43c(e)(1) and 40 CFR 60.43c(e)(4)]
- g. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

#### Compliance Demonstration Method:

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

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

h. See Section D - Source Emission Limitations and Testing Requirements for source-wide VOC emission limitations.

#### 3. Testing Requirements:

- a. While combusting biodiesel or LSD, if the permittee seeks to demonstrate compliance with the SO<sub>2</sub> standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described in 40 CFR 60.48c(f), as applicable [40 CFR 60.44c(h)].
- b. While combusting biodiesel or LSD, if the permittee seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the permittee shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2) [40 CFR 60.44c(g)].
- c. While combusting biodiesel or LSD, the permittee shall conduct performance tests as requested by the Administrator, to determine compliance with the particulate matter standards using the procedures and reference methods outlined in 40 CFR 60.45c(a) [40 CFR 60.45c(a)].
- d. If combusted during the calendar year, the permittee shall conduct annual analysis on processed fats for sulfur content (in weight percent) and heat content (in MMBtu/gal) of the fuel [401 KAR 50:055].
- e. Testing shall be conducted at such times as may be requested by the Cabinet [401 KAR 50:045, Section 1 and 401 KAR 59:005, Section 2(2)].
- f. The permittee shall conduct a performance test using Method 9 of 40 CFR Part 60 Appendix A-4 and the procedures in 40 CFR 60.11 to demonstrate compliance with the applicable limit in 40 CFR 60.43c by April 29, 2011, within 45 days of stopping use of an existing COMS, or within 180 days after initial startup of the facility, whichever is later, and shall comply with either 40 CFR 60.47c(a)(1), (a)(2) or (a)(3). The observation period for Method 9 of 40 CFR Part 60 Appendix A-4 performance testes may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation. [40 CFR 60.47c(a)]
  - i. Except as provided in 40 CFR 60.47c(a)(2) and (a)(3), the permittee shall conduct subsequent Method 9 of 40 CFR Part 60 Appendix A-4 performance tests using the procedures in 40 CFR 60.47c(a) according to the applicable schedule in 40 CFR 60.47c(a)(1)(i) through (a)(1)(iv), as determined by the most recent Method 9 of 40 CFR Part 60 Appendix A-4 performance test results. [40 CFR 60.47(a)(1)]
    - A. If no visible emissions are observed, a subsequent Method 9 of 40 CFR Part 60 Appendix A-4 performance test shall be completed within 12 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; [40 CFR 60.47c(a)(1)(i)]

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

- B. If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of 40 CFR Part 60 Appendix A-4 performance test shall be completed within 6 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; [40 CFR 60.47c(a)(1)(ii)]
- C. If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of 40 CFR Part 60 Appendix A-4 performance test shall be completed within 3 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; or [40 CFR 60.47c(a)(1)(iii)]
- D. If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of 40 CFR Part 60 Appendix A-4 performance test shall be completed within 45 calendar days from the date that the most recent performance test was conducted. [40 CFR 60.47c(a)(1)(iv)]
- ii. If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of 40 CFR Part 60 Appendix A-4 performance test, the permittee may, as an alternative to performing subsequent Method 9 of 40 CFR Part 60 Appendix A-4 performance tests, elect to perform subsequent monitoring using Method 22 of 40 CFR Part 60 Appendix A-7 according to the procedures specified in 40 CFR 60.47c(a)(2)(i) and (ii). [40 CFR 60.47c(a)(2)]
  - A. The permittee shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of 40 CFR Part 60 Appendix A-7 and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (i.e., 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (i.e., 90 seconds per 30 minute period), the permittee shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (i.e., 90 seconds) or conduct a new Method 9 of 40 CFR Part 60 Appendix A-4 performance test using the procedures in 40 CFR 60.47c(a) within 45 calendar days according to the requirements in 40 CFR 60.45c(a)(8). [40 CFR 60.47c(a)(2)(i)]
  - B. If no visible emissions are observed for 10 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed. [40 CFR 60.47c(a)(2)(ii)]

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

iii. If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of 40 CFR Part 60 Appendix A-4 performance test, the permittee may, as an alternative to performing subsequent Method 9 of 40 CFR Part 60 Appendix A-4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in 40 CFR 60.47c(a)(2). For reference purposes in preparing the monitoring plan, see OAQPS "Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems." This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods. [40 CFR 60.47c(a)(3)]

#### 4. Specific Monitoring Requirements:

- a. The monitoring requirements of 40 CFR 60.46c(a) and (d) shall not apply if the permittee seeks to demonstrate compliance with the SO<sub>2</sub> standards for biodiesel and LSD based on fuel supplier certification, as described under 40 CFR 60.48c(f) [40 CFR 60.46c(e)].
- b. The permittee shall monitor sulfur content (in weight percent) and heat content (in MMBtu/gal) of any biodiesel or LSD fuel combusted in this unit on a 30-day rolling average basis [40 CFR 60.42c(g) and 401 KAR 52:020, Section 10].
- c. The permittee shall monitor natural gas usage (in scf) and each secondary fuel usage (in gallons) on a monthly basis [401 KAR 52:020, Section 10].

#### 5. Specific Recordkeeping Requirements:

- a. If fuel supplier certification is used to demonstrate compliance with the SO<sub>2</sub> standards, the permittee shall record and maintain records for a period of two years following the date of such record of fuel supplier certification, including a certified statement signed by the permittee that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period. The fuel supplier certification shall also include the following information for biodiesel and LSD: [40 CFR 60.48c(e)(11) and 40 CFR 60.48c(i)]
  - i. The name of the oil supplier [40 CFR 60.48c(f)(1)(i)];
  - ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c [40 CFR 60.48c(f)(1)(ii)]; and
  - iii. The sulfur content or maximum sulfur content of the oil [40 CFR 60.48c(f)(1)(iii)].
- b. The permittee shall record and maintain records for a period of two years following the date of such record of sulfur content (in weight percent) and heat content (in MMBtu/gal) of any biodiesel or LSD combusted in this unit on a 30-day rolling average basis. These recordkeeping requirements shall not apply to the permittee if the permittee seeks to

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

demonstrate compliance with the SO<sub>2</sub> standards based on fuel supplier certification. [40 CFR 60.48c(i) and 401 KAR 52:020, Section 10]

- c. The permittee shall record and maintain records for a period of two years following the date of such record of any excess emissions observed through visual observation and any opacity determinations made using Reference Method 9, including the following information [40 CFR 60.48c(c) and 40 CFR 60.48c(i)]:
  - i. Dates and time intervals of all opacity observation periods [40 CFR 60.48c(c)(1)(i)];
  - ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test [40 CFR 60.48c(c)(1)(ii)]; and
  - iii. Copies of all visible emission observer opacity field data sheets [40 CFR 60.48c(c)(1)(iii)].
- d. The permittee shall record and maintain records for a period of two years following the date of such record of the amount of natural gas (in scf) and the amount of each secondary fuel (in gallons) combusted during each calendar month [401 KAR 52:020, Section 10; 40 CFR 60.48c(g); and 40 CFR 60.48c(i)].
- e. The permittee shall keep records of the manufacturer's recommended procedures for startup and shutdown, any instance in which the recommended procedures were not followed, and corrective actions taken [401 KAR 52:020, Section 10].

#### 6. Specific Reporting Requirements:

- a. If the permittee is subject to the SO<sub>2</sub> emission limits of 40 CFR 60.42c, or the PM or opacity limits of 40 CFR 60.43c, the permittee shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of 40 CFR 60 [40 CFR 60.48c(b)].
- b. If the permittee is subject to the opacity limits in 40 CFR 60.43c(c), the permittee shall submit excess emission reports for any excess emission from the unit that occur during the reporting period and maintain records according to the requirements specified in 40 CFR 60.48c(c)(1) through (3), as applicable to the visible emissions monitoring method used [40 CFR 60.48c(c)].
- c. If the permittee is subject to the SO<sub>2</sub> emission limits or fuel oil sulfur limits under 40 CFR 60.42c, the permittee shall submit reports to the Administrator and including the information specified in 40 CFR 60.48c(e)(1) through 40 CFR 60.48c(e)(11), as applicable [40 CFR 60.48c(d) and 40 CFR 60.48c(e)].
- d. The reporting period for the reports required under 40 CFR 60, Subpart Dc is each sixmonth period. All reports shall be submitted to the Administrator and shall be postmarked by the 30<sup>th</sup> day following the end of the reporting period. [40 CFR 60.48c(j)]

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

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

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

Emission Unit 11 (EP12) Diesel Fired RICE

**Description:** 

Model: Caterpillar
Construction Commenced: July 31, 2017
Fuel Input Capacity: 3.26 MMBtu/hr

Power Output: 465 HP

Primary Fuel: Ultra low sulfur diesel

#### **APPLICABLE REGULATIONS:**

N/A

#### PRECLUDED REGULATIONS:

**401 KAR 60:005**, Section 2(2)(dddd) 40 CFR 60.4200 through 60.4219, Tables 1 through 8 (**Subpart IIII**), Standards of Performance for Stationary Compression 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. To be considered a mobile, *nonroad engine* and preclude the applicability of 40 CFR 60, Subpart IIII, the internal combustion engine shall by itself or in or on a piece of equipment, be portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. [40 CFR 1068.30, *Nonroad engine* (1)(iii)]
- b. An internal combustion engine is not a *nonroad engine* if the engine remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. For any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced, include the time period of both engines in calculating the consecutive time period. [40 CFR 1068.30, *Nonroad engine* (2)(iii)]

#### Compliance Demonstration Method:

Compliance shall be demonstrated by 4. <u>Specific Monitoring Requirements</u> a. and 5. <u>Specific Recordkeeping Requirements</u> a.

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

#### 2. Emission Limitations:

a. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

#### Compliance Demonstration Method:

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

b. See Section D - Source Emission Limitations and Testing Requirements for source-wide VOC emission limitations.

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

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

#### 4. Specific Monitoring Requirements:

- a. The permittee shall monitor the engine's location including each location of the engine, the initial date at each location, the date moved from each location, and the engine's function at each location. [401 KAR 52:020, Section 10]
- b. The permittee shall monitor the amount (in gallons) of ultra-low sulfur diesel combusted on a monthly basis. [401 KAR 52:020, Section 10]

#### 5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the engine's location. The location log shall be affixed to the engine itself or to the piece of equipment the engine is on. The log shall specify each location of the engine, the initial date at each location, the date moved from each location, and the engine's function at each location. [401 KAR 52:020, Section 10 and 40 CFR 1068.201]
- b. The permittee shall maintain records of the amount (in gallons) of ultra-low sulfur diesel combusted on a monthly basis. [401 KAR 52:020, Section 10]

#### 6. Specific Reporting Requirements:

- a. The permittee shall report to the Division with a semi-annual report of the locations, the initial location dates, the move dates of the engine, and the engine's function at each location. [401 KAR 52:020, Section 10]
- b. See Section F Monitoring, Recordkeeping, and Reporting Requirements

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

Emission Unit 12 (EP 13) Bakery Product Box Grinder

#### **Description:**

Unit driven by reciprocating internal engine (EU 11) to crush bakery products

Maximum Capacity: 20 tons/hr Construction Commenced: 2017 Controls: None

#### **APPLICABLE REGULATION:**

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

#### 1. Operating Limitations:

N/A

#### 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 twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]

#### Compliance Demonstration Method:

Compliance shall be demonstrated according to 4. <u>Specific Monitoring Requirements</u> a. and 5. <u>Specific Reporting Requirements</u> a.

b. Particulate matter emissions from the stack into the open air shall not exceed [3.59P<sup>0.62</sup>] lbs/hr, where P is the processing rate in tons/hr. If the process rate is 1,000 lbs/hr or less, then the limit on PM emissions is 2.34 lbs/hr. [401 KAR 59:010, Section 3(2)]

#### Compliance Demonstration Method:

This unit is assumed to be in compliance with the applicable 401 KAR 59:010 PM emission limitations.

#### 3. Testing Requirement:

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

#### 4. Specific Monitoring Requirements:

- a. The permittee shall perform a qualitative visual observation of the opacity of emissions from EP 13 on a weekly basis while the unit is operating. If visible emissions are observed (not including condensed water in the plume), the permittee shall determine the opacity of emissions by U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. 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]
- b. The permittee shall monitor the amount (in tons) of bakery products processed and hours of operation on a monthly basis. [401 KAR 52:020, Section 10]

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

#### 5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the weekly qualitative visual observations, any U.S. EPA Reference Method 9 readings performed, and any corrective actions taken [401 KAR 52:020, Section 10].
- b. The permittee shall maintain records of the amount (in tons) of bakery products processed and hours of operation on a monthly basis. [401 KAR 52:020, Section 10]

#### 6. Specific Reporting Requirements:

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

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#### **SECTION C - INSIGNIFICANT ACTIVITIES**

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

<u>Description</u>	Generally Applicable Regulation
1. Storage Vessels (associated with fuel oil storage and vehicle refueling operations)	N/A
2. Storage Vessels (containing inorganic aqueous liquids, which do not include inorganic acids, with boiling points below the maximum storage	N/A
temperature at atmospheric temperature)  3. Laboratory Fume Hoods and Vents (used exclusively for chemical or physical analysis)	N/A
4. No.2 Oil-Fired Space Heaters (rated at less than 2.0 MMBtu/hr actual heat input)	N/A
<ol> <li>Degreasing Operations (parts-washers used in routine maintenance) ≤ 145 Gallons Solvent per Month</li> </ol>	N/A
6. Wastewater Treatment Activities (streams contain < 1% oil and grease content by volume)	N/A
7. Paved Haul Roads and Parking Lots	401 KAR 63:010
8. Boiler and Cooling Tower Blowdown Operations	401 KAR 63:010
9. Farming Operations (hay harvest from spray irrigation systems)	N/A
10. Routine Facility Maintenance	N/A
11. Cooling Tower	401 KAR 59:010
12. Blending Stock Unloading, Storage, & Transfer to Process Feed Hoppers	401 KAR 63:010
13. Product Loadout	401 KAR 63:010

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

- 1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
- 2. Particulate matter, sulfur dioxide, volatile organic compounds, and visible 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 applicability of 401 KAR 51:017 Prevention of Significant Deterioration of Air Quality, total source-wide VOC emissions shall not exceed 225 tons per year based on a 12-month rolling total. The permittee shall determine source-wide VOC emissions by calculating monthly emission totals using the most recent AP-42 emission factors (including the American Institute of Baking formula), stack test results, and/or fuel analysis data; and maintain a twelve-month rolling total [V-25-024].

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

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

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# SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:

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

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

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

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

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020, Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

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

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# 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 Florence Regional Office 8020 Veterans Memorial Office, Suite 110 Florance, KY 41042 U.S. EPA Region 4 Air Enforcement Branch Atlanta Federal Center 61 Forsyth St. SW Atlanta, GA 30303-8960

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

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#### **SECTION G - GENERAL PROVISIONS**

#### 1. General Compliance Requirements

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

- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
  - (2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
  - (4) New requirements become applicable to a source subject to the Acid Rain Program.
  - (5) 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].

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

e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020, Section 3(1)(c)].

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements. [Section 1a-15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3) b].
- 1. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3) d.].

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

o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3) a.].

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

#### 2. Permit Expiration and Reapplication Requirements

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

#### 3. Permit Revisions

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

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

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

No construction authorized by this permit. (V-25-024)

#### 5. <u>Testing Requirements</u>

- a. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045, Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

#### 6. Acid Rain Program Requirements

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

#### 7. Emergency Provisions

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

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

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

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

#### 8. Ozone Depleting Substances

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

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

#### 9. Risk Management Provisions

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

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

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#### **SECTION H - ALTERNATE OPERATING SCENARIOS**

N/A

#### **SECTION I - COMPLIANCE SCHEDULE**

N/A