

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

Draft

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

Permittee Name: Dyno Nobel Inc.
Mailing Address: 6440 S. Millrock Drive, Suite 150
Salt Lake City, UT 84121

Source Name: Dyno Nobel Inc.
Mailing Address: 400 Bickford Road
Graham, KY 42344

Source Location: 400 Bickford Road, Graham, KY 42344

Permit ID: V-26-044
Agency Interest #: 3241
Activity ID: APE20260001
Review Type: Title V / Synthetic Minor, Construction/Operating
Source ID: 21-177-00067

Regional Office: Owensboro Regional Office
3032 Alvey Park Dr. W., Suite 700
Owensboro, KY 42303
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County: Muhlenberg

**Application
Complete Date:** August 3, 2026
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-26-044	Initial	APE20260001	8/3/2026		Initial Title V/Syn Minor Permit; Construction of TNT Plant

SECTION A - PERMIT AUTHORIZATION

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

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

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

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

PETN Plant

List of Emission Points:

005 (EP5) – Crude PETN Manufacture, PETN-2, PETN-4

Description:

Crude pentaerythritol tetranitrate (PETN) is manufactured at this emission point. The affected facilities that manufacture crude PETN are: Feed Hooper (H101C), Nitrator (R102C), Cooler (R103C), Spent Acid Filter (F111C), Spent Acid Vacuum Tank, Slurry Vessel (R112C), Final Filter, Acid Water Vacuum Tank, Two (2) Vacuum Pumps, and Nitric Acid Day Tank (T106). Construction Date: April 1991.

Controls: 2000 Wet Scrubber controlling nitric acid.

006 (EP6) – Cap Grade PETN Manufacture/Nitration, PETN-1, PETN-3

Description:

Cap Grade PETN is manufactured at this emission point. The affected facilities that manufacture cap grade PETN are: Feed Hooper (H101), Nitrator (R102), Cooler (R103), Spent Acid Filter (F111), Spent Acid Vacuum Tank, Slurry Vessel (R112), Two (2) Pumps, Nitric Acid Day Tank (B401), Acetone Day Tank (B402), and Potassium Hydroxide Day Tank (B203). Construction Date: January 1981.

Controls: 1000 Wet Scrubber controlling nitric acid.

007 (EP7) – Cap Grade PETN Manufacture/Crystallization, PETN-6

Description:

Cap Grade PETN is manufactured at this emission point. The affected facilities that manufacture cap grade PETN are: Acetone day tank (T208), Transport Filter (F202), Through Drain tank (DV157A), Separator Pot, Vacuum tank (VT212), Dissolver (R203), Three (3) Crystallizers (R204, R205, R206), Final Filter (F207), Spent Acetone Vacuum Tank (VT217), Superfine Dissolver (SFD-1), Superfine Nutsche Filter (SFN-1), Packout Nutsche Filter, and Reclaim Dissolver (R4201).

Construction Date: May 1988.

Controls: Condenser controlling acetone.

008 (EP8) – Nitric Acid Recovery Process, ABS-1

Description:

Nitric acid is recovered at this emission point. The affected facilities that recover nitric acid are: Two (2) overhead feed tanks (T301/B1, T302/B2), Evaporator (E302/B3), Extraction Column (C306/K1), Bleaching Column (C308/K2), Separation Tank (T350/B4), Density Tank (T349/B5), Two (2) Condensers (X307/W2, X311.2/W6.2), two (2) heaters (X303/W1, X3309/W4), and two (2) coolers (X328.1/W3.1, X328.2/W3.2).

Construction Date: January 1981.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**009 (EP9) – Sulfuric Acid Recovery Process, SAC-1****Description:**

Sulfuric acid is recovered at this emission point. The affected facilities that recover sulfuric acid are: Heater (X329/W7), Evaporator Pot (E302/B7), Immersion Pot (T331/B8), One (1) condenser, Vacuum Pot (T337/B9), and Separation Tank (T348).
Construction Date: January 1981.

010 (EP10) – Acetone Recovery Process, APV-1**Description:**

Acetone is recovered at this emission point. The affected facilities that recover acetone are: Spent Acetone Day Tank (T503), Overhead Condenser (X507), Feed Preheater (X504), Two (2) Heaters (X505A, X505B, X530), Distillation Column (C506), AC99 Reflux Tank (T508), and Condensate Tank (T517), and Acetone Distillation Vapor Cooler (X515).
Construction Date: January 1981.

011 (EP11) – Tank Farm/Four Nitric Acid Tanks:**Description:**

Nitric Acid is stored at this emission point. The affected facilities that store nitric acid are:
Tank TF340/B18 (8,500 gal. Capacity)
Tank TF342/B14 (8,500 gal. Capacity)
Tank TF346/B19 (8,500 gal. Capacity)
Construction Date: January 1981.

Tank TF344/B15 (10,800 gal. Capacity)

Construction Date: 2013

Controls: K4 Wet Scrubber controlling nitric acid.

012 (EP12) – Tank Farm/Three Sulfuric Acid Tanks:**Description:**

Sulfuric Acid is stored at this emission point. The affected facilities that store sulfuric acid are:
Tank TF340/B (2,500 gal. Capacity)
Tank TF333/B10 (2,500 gal. Capacity)
Tank TF338/B17 (8,500 gal. Capacity)
Tank Farm/Sulfuric Acid Pipeline equipment: Sixty-six (66) flanges, twenty-one (21) valves and six (6) pumps.
Construction Date: January 1981.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**013 (EP13) – Tank Farm/Four Acetone Tanks:****Description:**

Acetone is stored at this emission point. The affected facilities that store acetone are:

Tank TF501/B18 (9,000 gal. Capacity)

Tank TF510/B14 (9,000 gal. Capacity)

Tank TF520/B15 (9,000 gal. Capacity)

Construction Date: January 1981.

Tank TF530-B19 (9,000 gal. Capacity)

Construction Date: 2015

Controls: Condenser controlling acetone.

014 (EP14) – Tank Farm/Potassium Hydroxide Tank:**Description:**

Potassium Hydroxide is stored at this emission point.

One (1) 8,500 gal. capacity Potassium Hydroxide tank.

Tank Farm/Potassium Hydroxide Pipeline equipment: Three (3) flanges, three (3) valves and one (1) pump.

Construction Date: September 1994.

NOTE - The pipeline equipment count listed above reflects an accurate count of the equipment as of the date of issuance of this permit but is not intended to limit the permittee to the exact numbers specified. The permittee may add or remove pipeline equipment without a permit revision as long as the equipment continues to comply with the applicable requirements listed below, and the changes do not cause a significant increase of emissions or potential to emit.

APPLICABLE REGULATIONS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*. [State-Origin Requirement]

401 KAR 63:021, *Existing sources emitting toxic air pollutants*. [State-Origin Requirement]

1. Operating Limitations:

- a. Crude PETN and Cap PETN manufacturing (emission units 005 and 006); and nitric acid tanks (emission unit 011) shall be vented to their respective scrubbers at all times. The scrubber liquid flowrate and pH for each scrubber shall be at or above the values measured during the most recent performance test, as shown below: [401 KAR 52:020, Section 10]
 - (1) For scrubber K4: pH of 0; scrubber liquid flow rate of 5 gpm.
 - (2) For scrubber 1000: pH of 2; scrubber liquid flow rate of 0.63 gpm.
 - (3) For scrubber 2000: pH of 3; scrubber liquid flow rate of 0.73 gpm.

Compliance Demonstration Method:

Compliance with **1. Operating Limitations** a. is demonstrated according to **4.**

Monitoring Requirements a.

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

- b. The acetone tanks shall be vented to the condenser at all times. The permittee shall operate the condenser according to manufacturer specifications or best engineering practices. [401 KAR 52:020, Section 10]

Compliance Demonstration Method:

Compliance with **1. Operating Limitations**, b. is demonstrated according to **4. Monitoring Requirements b.**

2. Emission Limitations:

- a. Total nitric acid emissions from the listed emission units 005, 006, and 011 shall not exceed 10.94 pounds per hour. [401 KAR 63:021, Section 1]

Compliance Demonstration Method:

Compliance is demonstrated by operating the scrubber for each emission unit according to the parameters established in the performance test. See **1. Operating Limitations a.**

- b. Total ammonia emissions from the listed emission unit 007 shall not exceed 1.624 pounds per hour. [401 KAR 63:021, Section 1]

Compliance Demonstration Method:

The permittee shall calculate emissions of ammonia on a monthly basis as follows:

$$\text{Monthly Ammonia } \left(\frac{\text{lb}}{\text{hr}} \right) = \sum \left(\frac{M \times EF_a / 2000 \text{ lb}}{H} \right)$$

M = Monthly processing rate of each emission unit (lb/month)

EF_a = Ammonia emission factor (0.02825 lb ammonia/ton)

H = Hours of operation of each emission unit (hours/month)

3. Testing Requirements:

Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the scrubber liquid flowrate and pH of each scrubber on a weekly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall monitor the coolant liquid flowrate of each condenser on a weekly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall record the scrubber liquid flowrate and pH of each scrubber as specified in **4. Monitoring Requirements a.** [401 KAR 52:020, Section 10]
- b. The permittee shall record the coolant liquid flowrate of each condenser as specified in **4. Monitoring Requirements b.** [401 KAR 52:020, Section 10]

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

- c. The permittee shall keep records of the monthly nitric acid and ammonia emissions as calculated in the **Compliance Demonstration Methods** for **2. Emission Limitations** a. and b. [401 KAR 52:020, Section 10]
- d. The permittee shall keep records of manufacturer's specifications or best engineering practices for scrubbers 2000, 1000, and K4 as well as the condenser. [401 KAR 52:020, Section 10]
- e. See **Section F**.

6. Specific Reporting Requirements:

Refer to **Section F**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**IA6 (EP IA6) – Gasoline Storage Tank****Description:**

Construction Date:	March 1994
Capacity:	550 gallons
Liquid Stored:	Gasoline
Maximum Annual Throughput:	3,200 gallons per year
Controls:	None

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(ddddd), 40 C.F.R. 63.11110 through 63.11132, Tables 1 through 3 (**Subpart CCCCCC**), *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities*.

1. Operating Limitations:

- a. If the permittee's gasoline dispensing facility (GDF) has a monthly throughput of less than 10,000 gallons of gasoline, the permittee must comply with the requirements in 40 CFR 63.11116. [40 CFR 63.11111(b)]
- b. If the permittee's affected source's throughput ever exceeds an applicable throughput threshold, the permittee's affected source will remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable throughput threshold. [40 CFR 63.11111(i)]
 - (1) If the permittee's existing affected source becomes subject to the control requirements in 40 CFR 63, Subpart CCCCCC because of an increase in the monthly throughput, as specified in 40 CFR 63.11111(c) or 40 CFR 63.11111(d), the permittee must comply with the standards in 40 CFR 63, Subpart CCCCCC no later than 3 years after the affected source becomes subject to the control requirements in 40 CFR 63, Subpart CCCCCC. [40 CFR 63.11113(c)]
- c. The permittee must, 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. 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 63.11115(a)]
- d. The permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following: [40 CFR 63.11116(a)]
 - (1) Minimize gasoline spills; [40 CFR 63.11116(a)(1)]
 - (2) Clean up spills as expeditiously as practicable; [40 CFR 63.11116(a)(2)]
 - (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; [40 CFR 63.11116(a)(3)]

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

- (i) Portable gasoline containers that meet the requirements of 40 CFR part 59, Subpart F, are considered acceptable for compliance with 40 CFR 63.11116(a)(3). [40 CFR 63.11116(d)]
- (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators. [40 CFR 63.11116(a)(4)]

Compliance Demonstration Method:

The permittee shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon threshold level. See **5. Specific Recordkeeping Requirements**. [40 CFR 63.11111(e)]

2. Emission Limitations:

None

3. Testing Requirements:

Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

The permittee shall monitor the gasoline throughput, in gallons, on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. For existing sources, as specified in 40 CFR 63.11112(d), recordkeeping to document monthly throughput must begin on January 10, 2008. For existing sources that are subject to 40 CFR 63, Subpart CCCCCC only because they load gasoline into fuel tanks other than those in motor vehicles, as defined in 40 CFR 63.11132, recordkeeping to document monthly throughput must begin on January 24, 2011. Records required under 40 CFR 63.11111(e), shall be kept for a period of 5 years. [40 CFR 63.11111(e)]
- b. The permittee must have records available within 24 hours of a request by the Administrator to document the permittee's gasoline throughput. [40 CFR 63.11116(b)]

6. Specific Reporting Requirements:

- a. The permittee is not required to submit notifications or reports as specified in 40 CFR 63.11125, 40 CFR 63.11126, or Subpart A of 40 CFR 63. [40 CFR 63.11116(b)]
- b. Refer to **Section F**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**017 (EP17) – Ajax Indirect Heat Exchanger****Description:**

Model:	Ajax
Construction Date:	March 2000
Maximum Continuous Rating:	1.05 mmBtu/hr
Power:	25 hp
Fuel:	Natural Gas
Control:	None

APPLICABLE REGULATIONS:

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

STATE-ORIGIN REQUIREMENTS:

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

1. Operating Limitations:

During a startup period or shutdown period, the permittee shall comply with the work practice standards established in 401 KAR 59:015, Section 7 as follows: [401 KAR 59:015, Section 7]

- (1) The permittee shall comply with 401 KAR 50:055, Section 2(5); [401 KAR 59:015, Section 7(1)(a)]
- (2) 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)]
- (3) 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)]
- (4) 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)]
- (5) Startups and shutdowns shall be conducted according to either: [401 KAR 59:015, Section 7(1)(e)]
 - (i) The manufacturer's recommended procedures; or [401 KAR 59:015, Section 7(1)(e)1.]
 - (ii) 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. [401 KAR 59:015, Section 7(1)(e)2.]

Compliance Demonstration Method:

Refer to **5. Recordkeeping Requirements a.**

2. Emission Limitations:

- a. The permittee shall not cause emissions of particulate matter in excess of 0.56 lb/mmBtu actual heat input. [401 KAR 59:015, Section 4(1)(a)]
- b. The permittee shall not cause emissions of gases that contain sulfur dioxide in excess of 3.0 lb/mmBtu actual heat input. [401 KAR 59:015, Section 5(1)(a)1.]

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

- c. The permittee shall not cause emission of particulate matter in excess of twenty (20) percent opacity except: [401 KAR 59:015, Section 4(2)]
 - (1) 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; and [401 KAR 59:015, Section 4(2)(b)]
 - (2) 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:

Compliance with the 401 KAR 59:015 emission standards is assumed. [401 KAR 50:045, Section 4(3)(c)1.]

- d. The permittee shall provide the utmost care and consideration, in the handling of materials from which hazardous matter or toxic substances may be emitted, to the potentially harmful effects of the emissions resulting from such activities. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. 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.

3. Testing Requirements:

Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1, and 401 KAR 59:005, Section 2(2)]

4. Specific Monitoring Requirements:

The permittee shall monitor the amount of natural gas combusted, in mmscf, on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. 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 action taken. [401 KAR 52:020, Section 10]
- b. The permittee shall keep records of the amount of natural gas combusted, in mmscf, on a monthly basis. [401 KAR 52:020, Section 10]

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

6. Specific Reporting Requirements:

Refer to Section F.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**019 (EP19) – Hurst Indirect Heat Exchanger****Description:**

Model: Series 500 Sect. 1 Steam
with Low NO_x Burners/Flue Gas Recirculation
Construction Date: September 2021
Maximum Continuous Rating: 10.5 mmBtu/hr
Fuel: Natural Gas
Control: None

UTIL-1 34.7 mmBtu/hr RENTECH Natural Gas Boiler**Description:**

Model: Rentech TRD-1-40 (or equivalent)
with Low NO_x Burners
Construction Date: December 2026 (Proposed)
Maximum Continuous Rating: 34.7 mmBtu/hr
Fuel: Natural Gas
Control: None

APPLICABLE REGULATIONS:

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

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

STATE-ORIGIN REQUIREMENTS:

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

1. Operating Limitations:

During a startup period or shutdown period, the permittee shall comply with the work practice standards established in 401 KAR 59:015, Section 7 as follows: [401 KAR 59:015, Section 7]

- (1) The permittee shall comply with 401 KAR 50:055, Section 2(5); [401 KAR 59:015, Section 7(1)(a)]
- (2) 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)]
- (3) 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)]
- (4) 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)]
- (5) Startups and shutdowns shall be conducted according to either: [401 KAR 59:015, Section 7(1)(e)]
 - (i) The manufacturer's recommended procedures; or [401 KAR 59:015, Section 7(1)(e)1.]

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

- (ii) 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. [401 KAR 59:015, Section 7(1)(e)2.]

Compliance Demonstration Method:

Refer to **5. Recordkeeping Requirements** a.

2. Emission Limitations:

- a. The permittee shall not cause emissions of particulate matter in excess of the following: [401 KAR 59:015, Section 4(1)(c)]
 - (1) For EU 019: 0.54 lb/MMBtu actual heat input
 - (2) For EU UTIL-1: 0.39 lb/MMBtu actual heat input.
- b. The permittee shall not cause emissions of gases that contain sulfur dioxide in excess of the following: [401 KAR 59:015, Section 5(1)(c)2.b.]
 - (1) For EU 019: 2.83 lb/MMBtu actual heat input.
 - (2) For EU UTIL-1: 1.60 lb/MMBtu actual heat input
- c. The permittee shall not cause emission of particulate matter in excess of twenty (20) percent opacity except: [401 KAR 59:015, Section 4(2)]
 - (1) 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; and [401 KAR 59:015, Section 4(2)(b)]
 - (2) 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:

Compliance with the 401 KAR 59:015 emission standards is assumed. [401 KAR 50:045, Section 4(3)(c)1.]

- d. The permittee shall provide the utmost care and consideration, in the handling of materials from which hazardous matter or toxic substances may be emitted, to the potentially harmful effects of the emissions resulting from such activities. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. 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.

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

3. Testing Requirements:

Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1, and 401 KAR 59:005, Section 2(2)]

4. Specific Monitoring Requirements:

The permittee shall monitor the amount of natural gas combusted, in mmscf, on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. 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 action taken. [401 KAR 52:020, Section 10]
- b. Except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the permittee of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day. [40 CFR 60.48c(g)(1)]
- c. As an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the permittee of an affected facility that combusts only natural gas, wood, fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO₂ standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month. [40 CFR 60.48c(g)(2)]
- d. As an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the permittee of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to 40 CFR 60, Subpart Dc) at that property are natural gas, wood, distillate oil meeting the most current requirements in 40 CFR 60.42C to use fuel certification to demonstrate compliance with the SO₂ standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month. [40 CFR 60.48c(g)(3)]
- e. All records required under 40 CFR 60.48c shall be maintained by the permittee of the affected facility for a period of two years following the date of such record. [40 CFR 60.48c(i)]
- f. Refer to **Section F**.

6. Specific Reporting Requirements:

Refer to **Section F**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**UTIL-2 - Fire Water Pump Engine****Description:**

Model:	Clarke Model C18H0-UFAD38 (or equivalent)
Manufacturer Date:	2025
Construction Date:	December 2026 (Proposed)
Maximum Fuel Consumption:	34 gallons/hr
Power:	542 hp (404 kW-h)
Fuel:	Diesel
Control:	None

APPLICABLE REGULATIONS:

401 KAR 60:005, Section 2(2)(oooo), 40 C.F.R. 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 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 of a new stationary RICE located at an area source must meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart IIII, for compression ignition engines. No further requirements apply for such engines under 40 CFR 63, Subpart ZZZZ. [40 CFR 63.6590(c) and 40 CFR 63.6590(c)(1)]
- b. The permittee must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel. [40 CFR 60.4207(b)]
- c. The permittee shall do all of the following, except as permitted under 40 CFR 60.4211(g): [40 CFR 60.4211(a)]
 - (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; 40 CFR 60.4211(a)(1)]
 - (2) Change only those emission-related settings that are permitted by the manufacturer; and [40 CFR 60.4211(a)(2)]
 - (3) Meet the requirements of 40 CFR Part 1068 as they apply. [40 CFR 60.4211(a)(3)]
- d. The permittee shall operate the emergency stationary ICE according to the requirements of 40 CFR 60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60, Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.4211(f)(1) through (3), is prohibited. If the permittee does not operate the engine according to the requirements of 40 CFR 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under 40 CFR 60, Subpart IIII and must meet all the requirements for non-

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

emergency engines. [40 CFR 60.4211(f)]

- (1) There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR 60.4211(f)(1)]
 - (2) The permittee may operate the emergency stationary ICE for the purpose specified in 40 CFR 60.4211(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by 40 CFR 60.4211(f)(2). [40 CFR 60.4211(f)(2)]
 - (i) Emergency stationary ICE 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 organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [40 CFR 60.4211(f)(2)(i)]
- e. The permittee shall operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 and 40 CFR 60.4205 over the entire life of the engine. [40 CFR 60.4206]
 - f. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 60.4211(g) and 40 CFR 60.4211(g)(3)]

2. Emission Limitations:

- a. The permittee shall comply with the emissions standards in Table 4 to 40 CFR 60, Subpart IIII as follows: [40 CFR 60.4205(c)]
 - (1) NMHC + NO_x: 4.0 g/KW-hr (3.0 g/hp-hr); [Table 4 to 40 CFR 60, Subpart IIII]
 - (2) CO: 3.5 g/KW-hr (2.6 g/hp-hr); and [Table 4 to 40 CFR 60, Subpart IIII]
 - (3) PM: 0.20 g/KW-hr (0.15 g/hp-hr) [Table 4 to 40 CFR 60, Subpart IIII]

Compliance Demonstration Method:

The permittee must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(c) for the same model year and maximum NPFA nameplate engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g) (see 1.

Operating Limitations f., 3. Testing Requirements c., and 5. Specific Recordkeeping Requirements d. [40 CFR 60.4211(c)]

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

3. Testing Requirements:

- a. Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]
- b. Performance tests conducted pursuant to 40 CFR 60, Subpart IIII, if required shall be conducted in accordance with 40 CFR 60.4212(a) through (e). [40 CFR 60.4212]
- c. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. The permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. [40 CFR 60.4211(g) and 40 CFR 60.4211(g)(3)]

4. Specific Monitoring Requirements:

- a. The permittee of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, shall install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]
- b. The permittee shall monitor the operating hours of the engine on a monthly basis. [401 KAR 52:020, Section 10]
- c. The permittee shall monitor the amount of diesel fuel usage (gallons) on a monthly basis. [401 KAR 52:020, Section 10]
- d. See **Section D**.
- e. Refer to **Section F**.

5. Specific Recordkeeping Requirements:

- a. Starting with the model years in Table 5 to 40 CFR 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]
- b. For emergency stationary ICE, the permittee is not required to submit an initial notification. Starting with the model years in Table 5 to 40 CFR 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the permittee must keep records of the operation of the engine

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

in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]

- c. The permittee shall maintain records of the amount of diesel fuel usage (gallons) in the engine on a monthly basis. Records of fuel usage can be determined from the monthly hours of operation multiplied by the maximum hourly fuel usage rate for the engine. [401 KAR 52:020, Section 10]
- d. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must keep a maintenance plan and records of conducted maintenance. [40 CFR 60.4211(g) and 40 CFR 60.4211(g)(3)]
- e. See **Section D**.
- f. Refer to **Section F**.

6. Specific Reporting Requirements:

Refer to **Section F**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**UTIL-3 & 4 – 1475 hp, 4SLB, Natural Gas, Emergency Generator Engines 1 & 2****Description:**

Model:	Generac MG1000 (or equivalent)
Type:	4-Stroke Rich Burn (4SLB)
Manufacturer Date:	2025
Construction Date:	December 2026 (Proposed)
Power:	1475 hp
Fuel:	Natural Gas
Controls:	None

APPLICABLE REGULATIONS:

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

401 KAR 63:002 Section 2(4)(eeee), 40 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 of a new stationary RICE located at an area source must meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart JJJJ, for Spark Ignition engines. No further requirements apply for such engines under 40 CFR 63, Subpart ZZZZ. [40 CFR 63.6590(c) & 40 CFR 63.6590(c)(1)]
- b. The permittee of a stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in 40 CFR 60.4233 over the entire life of the engine. [40 CFR 60.4234]
- c. The permittee must operate the emergency stationary ICE according to the requirements in 40 CFR 60.4243(d)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60, Subpart JJJJ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.4243(d)(1) through (3), is prohibited. If the permittee does not operate the engine according to the requirements in 40 CFR 60.4243(d)(1) through (3), the engine will not be considered an emergency engine under 40 CFR 60, Subpart JJJJ and must meet all requirements for non-emergency engines. [40 CFR 60.4243(d)]
 - (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
 - (2) The permittee may operate the emergency stationary ICE for the purpose specified in 40 CFR 60.4243(d)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed 40 CFR 60.4243(d)(3) counts as part of the 100 hours per calendar year allowed by 40 CFR 60.4243(d)(2). [40 CFR 60.4243(d)(2)]

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

- (i) Emergency stationary ICE 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 organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [40 CFR 60.4243(d)(2)(i)]
- (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4243(d)(2). Except as provided in 40 CFR 60.4243(d)(3)(i), 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. [40 CFR 60.4243(d)(3)]
 - (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [40 CFR 60.4243(d)(3)(i)]
 - (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator; 40 CFR 60.4243(d)(3)(i)(A)]
 - (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [40 CFR 60.4243(d)(3)(i)(B)]
 - (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [40 CFR 60.4243(d)(3)(i)(C)]
 - (D) The power is provided only to the facility itself or to support the local transmission and distribution system. [40 CFR 60.4243(d)(3)(i)(D)]
 - (E) The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee. [40 CFR 60.4243(d)(3)(i)(E)]
- d. The permittee may operate the engine using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the permittee is required to conduct a performance test to demonstrate compliance with the emission standards of 40 CFR 60.4233. [40 CFR 60.4243(e)]

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

- e. It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [40 CFR 60.4243(g)]
- f. The permittee must meet the applicable parts of the General Provisions in 40 CFR 60.1 through 60.19 shown in Table 3 to 40 CFR 60, Subpart JJJJ. [40 CFR 60.4246(a)]

2. Emission Limitations:

- a. The permittee of a stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) must comply with the emission standards in Table 1 to 40 CFR 60, Subpart JJJJ for their emergency ICE with a maximum engine power greater than 130 HP: [40 CFR 60.4233(e) and Table 1 to 40 CFR 60, Subpart JJJJ]
 - (1) NO_x :2.0 g/hp-hr (160 ppmvd at 15% O₂);
 - (2) CO: 4.0 g/hp-hr (540 ppmvd at 15% O₂);
 - (3) VOC: 1.0 g/hp-hr (86 ppmvd at 15% O₂).

Compliance Demonstration Method:

The permittee must demonstrate compliance with the 40 CFR 60, Subpart JJJJ emission limitations according to one of the methods specified in 40 CFR 60.4243(b)(1) and (2). [40 CFR 60.4243(b)]

- (a) Purchasing an engine certified according to procedures specified in 40 CFR 60, Subpart JJJJ, for the same model year and demonstrating compliance according to one of the methods specified in 40 CFR 60.4243(a). [40 CFR 60.4243(b)(1)]
 - 1) If the permittee operates and maintains the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the permittee must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. The permittee must also meet the requirements as specified in 40 CFR part 1068, Subparts A through D, as they apply to the permittee. If the permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the permittee's stationary SI internal combustion engine will not be considered out of compliance. [40 CFR 60.4243(a)(1)]
 - 2) If the permittee does not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the permittee's engine will be considered a non-certified engine, and the permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. See **3. Testing Requirements**. [40 CFR 60.4243(a)(2) and 40 CFR 60.4243(a)(2)(iii)]
- (b) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in 40 CFR 60.4233(e) and according to the requirements specified

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

in 40 CFR 60.4244, as applicable, and according to 40 CFR 60.4243(b)(2)(ii). [40 CFR 60.4243(b)(2)]

- 1) The permittee of a stationary SI internal combustion engine greater than 500 HP must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. [40 CFR 60.4243(b)(2)(ii)]

3. Testing Requirements:

- a. Performance tests conducted pursuant to 40 CFR 60, Subpart JJJJ, if required, shall be conducted in accordance with 40 CFR 60.4244(a) through (f): [40 CFR 60.4244]
- b. If the permittee does not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, or if the permittee purchases a non-certified engine, the permittee must conduct an initial performance test (within 1 year for a certified engine, or within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility for a non-certified engine) and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. [40 CFR 60.4243(a)(2)(iii) and 40 CFR 60.4243(b)(2)(ii)]
- c. Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

- a. If the emergency stationary SI internal combustion engine does not meet the standards applicable to non-emergency engines, the permittee must install a non-resettable hour meter. [40 CFR 60.4237(a)]
- b. The permittee shall monitor the operating hours for the engine on a monthly basis. [401 KAR 52:030, Section 10]
- c. The permittee shall monitor the amount of fuel usage (MMscf) on a monthly basis. [401 KAR 52:030, Section 10]
- d. Refer to **Section F**.

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the amount of natural gas burned in the reciprocating engine on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee must keep records of the information in 40 CFR 60.4245(a)(1) through (4), as follows: [40 CFR 60.4245(a)]

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

- (1) All notifications submitted to comply with 40 CFR 60, Subpart JJJJ and all documentation supporting any notification. [40 CFR 60.4245(a)(1)]
 - (2) Maintenance conducted on the engine. [40 CFR 60.4245(a)(2)]
 - (3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 1048, 1054, and 1060, as applicable. [40 CFR 60.4245(a)(3)]
 - (4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards. [40 CFR 60.4245(a)(4)]
- c. The permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must 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. [40 CFR 60.4245(b)]
- d. Refer to **Section F**.

6. Specific Reporting Requirements:

- a. The permittee of a stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in 40 CFR 60.4231 must submit an initial notification as required in 40 CFR 60.7(a)(1). The notification must include the information in 40 CFR 60.4245(c)(1) through (5). The permittee must submit the notification electronically according to 40 CFR 60.4245(g). [40 CFR 60.4245(c)]
 - (1) Name and address of the owner or operator; [40 CFR 60.4245(c)(1)]
 - (2) The address of the affected source; [40 CFR 60.4245(c)(2)]
 - (3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement; [40 CFR 60.4245(c)(3)]
 - (4) Emission control equipment; and [40 CFR 60.4245(c)(4)]
 - (5) Fuel used. [40 CFR 60.4245(c)(5)]
- b. The permittee of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in 40 CFR 60.4244 within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference—see 40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7. Performance tests must be reported electronically according to 40 CFR 60.4245(f). [40 CFR 60.4245(d)]
- c. Within 60 days after the date of completing each performance test, the permittee must submit the results following the procedures specified in 40 CFR 60.4245(g). Data collected using test methods that are supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air->

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

emissions/electronic-reporting-tool-ert) at the time of the test must be submitted in a file format generated using the EPA's ERT. Alternatively, the permittee may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test must be included as an attachment in the ERT or an alternate electronic file. [40 CFR 60.4245(f)]

- d. If the emergency stationary SI ICE operates for the purpose specified in 40 CFR 60.4243(d)(3)(i), the permittee must submit an annual report according to the requirements in 40 CFR 60.4245(e)(1) through (3). [40 CFR 60.4245(e)]
 - (1) The report must contain the following information: [40 CFR 60.4245(e)(1)]
 - (i) Company name and address where the engine is located. [40 CFR 60.4245(e)(1)(i)]
 - (ii) Date of the report and beginning and ending dates of the reporting period. [40 CFR 60.4245(e)(1)(ii)]
 - (iii) Engine site rating and model year. [40 CFR 60.4245(e)(1)(iii)]
 - (iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place. [40 CFR 60.4245(e)(1)(iv)]
 - (v) Hours spent for operation for the purposes specified in 40 CFR 60.4243(d)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 60.4243(d)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine. [40 CFR 60.4245(e)(1)(v)]
 - (2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
 - (3) The annual report must be submitted electronically using the Subpart JJJJ specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). However, if the reporting form specific to 40 CFR 60, Subpart JJJJ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 60.4. Submit annual report electronically according to 40 CFR 60.4245(g).
- e. If the permittee is required to submit notifications or reports following the procedure specified in 40 CFR 60.4245(g), the permittee must submit notifications or reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The EPA will make all the information submitted through CEDRI available to the public without further notice to the permittee. Do not use CEDRI to submit information the permittee claims as CBI. Although we do not expect persons to assert a claim of CBI, if the permittee wishes to assert a CBI claim for some of the information in the report or notification, the permittee must submit a complete file in the format specified in 40 CFR 60, Subpart JJJJ, including information claimed to be CBI, to the EPA following the procedures in 40 CFR 60.4245(g)(1) and (2). Clearly mark the part or all of the information that the permittee claims to be CBI. Information not marked as CBI may be

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

authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. The permittee must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described earlier in 40 CFR 60.4245(g). [40 CFR 60.4245(g)]

(1) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address oaqpscbi@epa.gov, and as described in 40 CFR 60.4245(g), should include clear CBI markings. ERT files should be flagged to the attention of the Group Leader, Measurement Policy Group; all other files should be flagged to the attention of the Stationary Spark Ignition Internal Combustion Engine Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if the permittee does not have their own file sharing service, please email oaqpscbi@epa.gov, to request a file transfer link. [40 CFR 60.4245(g)(1)]

(2) If the permittee cannot transmit the file electronically, the permittee may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, 109 T.W. Alexander Drive, P.O. Box 12055, Research Triangle Park, North Carolina 27711. ERT files should be sent to the attention of the Group Leader, Measurement Policy Group, and all other files should be sent to the attention of the Stationary Spark Ignition Internal Combustion Engine Sector Lead. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope. [40 CFR 60.4245(g)(2)]

f. If the permittee is required to electronically submit a report through CEDRI in the EPA's CDX, the permittee may assert a claim of EPA system outage for failure to timely comply with that reporting requirement. To assert a claim of EPA system outage, the permittee must meet the requirements outlined in 40 CFR 60.4245(h)(1) through (7). [40 CFR 60.4245(h)]

(1) The permittee must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems. [40 CFR 60.4245(h)(1)]

(2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due. [40 CFR 60.4245(h)(2)]

(3) The outage may be planned or unplanned. [40 CFR 60.4245(h)(3)]

(4) The permittee must submit notification to the Administrator in writing as soon as possible following the date the permittee first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting. [40 CFR 60.4245(h)(4)]

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

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

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

- (4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator. [40 CFR 60.4245(i)(4)]
 - (5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. [40 CFR 60.4245(i)(5)]
- h. Any records required to be maintained by 40 CFR 60, Subpart JJJJ, that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation. [40 CFR 60.4245(j)]
- i. Refer to **Section F**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**RMH-1A – Toluene Tank****Description:**

Construction Date:	December 2026 (Proposed)
Capacity:	31,304 gallons (118.50 m ³)
Type:	Vertical Fixed Roof
Liquid Stored:	Toluene
Maximum Annual Throughput:	1,219,392 gallons per year
Maximum True Vapor Pressure:	~0.60 psia (4.13 kPa)
Controls:	Vapor Balance Loading System

APPLICABLE REGULATIONS:

401 KAR 60:005 Section 2(2)(s), 40 C.F.R. 60.110c through 60.117c (**Subpart Kc**), *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After October 4, 2023*

STATE-ORIGIN REQUIREMENTS:

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

1. Operating Limitations:

Storage vessels with a capacity greater than or equal to 20,000 gallons (gal) (75.7 cubic meters (m³)) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after October 4, 2023, which do not meet the criteria of 40 CFR 60.110c (c)(1), (c)(2), (d)(1), or (d)(2) are subject to the requirements in 40 CFR 60.113c(d), if applicable, and 40 CFR 60.115c(b). [40 CFR 60.110c(f)]

Compliance Demonstration Method:

Refer to **5. Specific Recordkeeping Requirements a.**

2. Emission Limitations:

The permittee shall provide the utmost care and consideration, in the handling of materials from which hazardous matter or toxic substances may be emitted, to the potentially harmful effects of the emissions resulting from such activities. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. 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.

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

3. Testing Requirements:

Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

The permittee shall monitor the throughput in thousand gallons (Mgal) on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. *Requirements for determining maximum true vapor pressure.* For each affected storage vessel, the permittee must determine the maximum true vapor pressure of the stored VOL according to the requirements specified in 40 CFR 60.113c(d)(1) and (2). For storage vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For storage vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.113c(d)]
 - (1) Prior to the initial filling of the storage vessel or to the refilling of the storage vessel with a new VOL, the highest maximum true vapor pressure for the range of anticipated liquids to be stored, including mixtures for which the permittee can define the range of concentrations for constituents in the mixture or with a known maximum Reid vapor pressure, must be determined using any one of the methods described in 40 CFR 63.113c(d)(1)(i) through (iv). [40 CFR 60.113c(d)(1)]
 - (i) As obtained from standard reference texts. [40 CFR 60.113c(d)(1)(i)]
 - (ii) ASTM D6377-20. Perform the method using a vapor-to-liquid ratio of 4:1, which is expressed in the method as VPCR. [40 CFR 60.113c(d)(1)(ii)]
 - (iii) ASTM D6378-22. Perform the method using a vapor-to-liquid ratio of 4:1. [40 CFR 60.113c(d)(1)(iii)]
 - (iv) As measured by an appropriate method as approved by the Administrator. [40 CFR 60.113c(d)(1)(iv)]
- b. For each storage vessel affected facility as specified in 40 CFR 60.110c(a), the permittee must keep readily accessible records for the life of the source showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.115c(b)]
- c. The permittee shall keep records of the equipment to be used and the procedures to be followed when unloading tank trucks and displacing vapors from the storage tank to the transport vessel from which the liquid originates, as well as a record of all components of the pressure relief device(s), including pressure relief valves and conservation vents. These records must be kept as long as the affected tank is in operation. [401 KAR 52:020, Section 10]
- d. The permittee shall maintain the following records for the affected tank: [401 KAR 52:020, Section 10]

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

- (1) For the material(s) stored in the tank, records of the maximum true vapor pressure (psia) and other supporting documentation, such as material safety data sheets and certificates of analysis.
- (2) Records of the throughput in Mgal on a monthly basis.
- (3) Inspection and maintenance records, which shall include:
 - (i) Dates of inspections of the affected tank with observed conditions
 - (ii) Dates and description of maintenance of the affected tank.
 - (iii) Identification of each period when the affected tank was emptied for inspection or maintenance with calculations of emissions from degassing the tank, with supporting documentation.
- (4) Records of VOC emissions of the affected tank in tons on a monthly basis, with supporting data and calculations.

e. Refer to **Section F**.

6. Specific Reporting Requirements:

Refer to **Section F**.

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

RMH-1B – Fugitive Equipment Leaks in Toluene Service

Description:

Equipment Type	Process Area		
	TNT	ARU	Tanks / RMH
Light Liquid Valves	3	5	50
Light Liquid Pumps	-	1	3
Connectors	15	21	75
Open Ended Lines	-	-	2
Gas/ Vapor Pressure Relief Valves	-	3	1
Sampling Systems	-	-	2

NOTE - The pipeline equipment count listed above reflects an accurate count of the equipment as of the date of issuance of this permit but is not intended to limit the permittee to the exact numbers specified. The permittee may add or remove pipeline equipment without a permit revision as long as the equipment continues to comply with the applicable requirements listed below and the changes do not result in a significant increase in emissions on potential to emit.

APPLICABLE REGULATIONS:

401 KAR 60:005, Section 2(2)(iii), 40 C.F.R. 60.480b through 60.489b, (**Subpart VVb**), *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After April 25, 2023.*

STATE-ORIGIN REQUIREMENTS:

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

1. Operating Limitations:

- a. The permittee shall demonstrate compliance with the requirements of 40 CFR 60.482-1b through 40 CFR 60.482-11b or 40 CFR 60.480b(e) for all equipment within 180 days of initial startup. [40 CFR 60.482-1b(a)]
- b. The permittee may request a determination of equivalence of a means of emission limitation to the requirements of 40 CFR 60.482-2b, 40 CFR 60.482-3b, 40 CFR 60.482-5b, 40 CFR 60.482-6b, 40 CFR 60.482-7b, 40 CFR 60.482-8b, and 40 CFR 60.482-10b as provided in 40 CFR 60.484b. [40 CFR 60.482-1b(c)(1)]
- c. If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of 40 CFR 60.482-2b, 40 CFR 60.482-3b, 40 CFR 60.482-5b, 40 CFR 60.482-6b, 40 CFR 60.482-7b, 40 CFR 60.482-8b, or 40 CFR 60.482-10b, the permittee shall comply with the requirements of that determination. [40 CFR 60.482-1b(c)(2)]

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

- d. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2b through 40 CFR 60.482-11b if it is identified as required in 40 CFR 60.486b(e)(5). [40 CFR 60.482-1b(d)]
- e. Equipment that the permittee designates as being in VOC service less than 300 hr/yr is excluded from the requirements of 40 CFR 60.482-2a through 40 CFR 60.482-11b if it is identified as required in 40 CFR 60.486b(e)(6) and it meets any of the conditions specified in 40 CFR 60.482-1b(e)(1) through (3). [40 CFR 60.482-1b(e)]
 - (1) The equipment is in VOC service only during startup and shutdown, excluding startup and shutdown between batches of the same campaign for a batch process. [40 CFR 60.482-1b(e)(1)]
 - (2) The equipment is in VOC service only during process malfunctions or other emergencies. [40 CFR 60.482-1b(e)(2)]
 - (3) The equipment is backup equipment that is in VOC service only when the primary equipment is out of service. [40 CFR 60.482-1b(e)(3)]

Pumps in Light Liquid Service:

- f. Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485b(b), except as provided in 40 CFR 60.482-1b(c) and (f), and 40 CFR 60.482-2b(d), (e), and (f). A pump that begins operation in light liquid service after the initial startup date for the process unit must be monitored for the first time within 30 days after the end of its startup period, except for a pump that replaces a leaking pump and except as provided in 40 CFR 60.482-1b(c), and 60.482-1b(d), (e), and (f). [40 CFR 60.482-2b(a)(1)]
- g. Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in 40 CFR 60.482-1b(f). [40 CFR 60.482-2b(a)(2)]
- h. The instrument reading that defines a leak is specified in 40 CFR 60.482-2b(b)(1)(i) and (ii): [40 CFR 60.482-2b(b)(1)]
 - (1) 5,000 parts per million (ppm) or greater for pumps handling polymerizing monomers; [40 CFR 60.482-2b(b)(1)(i)]
 - (2) 2,000 ppm or greater for all other pumps. [40 CFR 60.482-2b(b)(1)(ii)]
- i. If there are indications of liquids dripping from the pump seal, the permittee shall follow the procedure specified in either 40 CFR 60.482-2b(b)(2)(i) or (ii). This requirement does not apply to a pump that was monitored after a previous weekly inspection and the instrument reading was less than the concentration specified in 40 CFR 60.482-2b(b)(2)(i) or (ii), whichever is applicable. [40 CFR 60.482-2b(b)(2)]
 - (1) Monitor the pump within 5 days as specified in 40 CFR 60.485b(b). A leak is detected if the instrument reading measured during monitoring indicates a leak as specified in 40 CFR 60.482-2a(b)(1)(i) or (ii). The leak shall be repaired using the procedures in 40 CFR 60.482-2b(c). [40 CFR 60.482-2b(b)(2)(i)]
 - (2) Designate the visual indications of liquids dripping as a leak, and repair the leak using either the procedures in 40 CFR 60.482-2b(c) or by eliminating the visual indications of liquids dripping. [40 CFR 60.482-2b(b)(2)(ii)]

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

- j. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9b. [40 CFR 60.482-2b(c)(1)]
- k. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described in 40 CFR 60.482-2b(c)(2)(i) and (ii), where practicable. [40 CFR 60.482-2b(c)(2)]
 - (1) Tightening the packing gland nuts; [40 CFR 60.482-2b(c)(2)(i)]
 - (2) Ensuring that the seal flush is operating at design pressure and temperature. [40 CFR 60.482-2b(c)(2)(ii)]
- l. Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2b(a), provided the requirements specified in 40 CFR 60.482-2b(d)(1) through (6), are met. [40 CFR 60.482-2b(d)]
 - (1) Each dual mechanical seal system is: [40 CFR 60.482-2b(d)(1)]
 - (i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or [40 CFR 60.482-2b(d)(1)(i)]
 - (ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 CFR 60.482-10b; or [40 CFR 60.482-2b(d)(1)(ii)]
 - (iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere. [40 CFR 60.482-2b(d)(1)(iii)]
 - (2) The barrier fluid system is in heavy liquid service or is not in VOC service. [40 CFR 60.482-2b(d)(2)]
 - (3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both. [40 CFR 60.482-2b(d)(3)]
 - (4)
 - (i) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals. [40 CFR 60.482-2b(d)(4)(i)]
 - (ii) If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the owner or operator shall follow the procedure specified in either 40 CFR 60.482-2b(d)(4)(ii)(A) or (B) prior to the next required inspection. [40 CFR 60.482-2b(d)(4)(ii)]
 - (5)
 - (i) Each sensor as described in 40 CFR 60.482-2b(d)(3) is checked daily or is equipped with an audible alarm. [40 CFR 60.482-2b(d)(5)(i)]
 - (ii) The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. [40 CFR 60.482-2b(d)(5)(ii)]
 - (iii) If the sensor indicates failure of the seal system, the barrier fluid system, or both, based on the criterion established in 40 CFR 60.482-2b(d)(5)(ii), a leak is detected. [40 CFR 60.482-2b(d)(5)(iii)]
 - (6)
 - (i) When a leak is detected pursuant to 40 CFR 60.482-2b(d)(4)(ii)(A), it shall be repaired as specified in 40 CFR 60.482-2b(c). [40 CFR 60.482-2b(d)(6)(i)]

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

- (ii) A leak detected pursuant to 40 CFR 60.482-2b(d)(5)(iii) shall be repaired within 15 days of detection by eliminating the conditions that activated the sensor. [40 CFR 60.482-2b(d)(6)(ii)]
 - (iii) A designated leak pursuant to 40 CFR 60.482-2b(d)(4)(ii)(B) shall be repaired within 15 days of detection by eliminating visual indications of liquids dripping. [40 CFR 60.482-2b(d)(6)(iii)]
- m. Any pump that is designated, as described in 40 CFR 60.486b(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2b(a), (c), and (d) if the pump: [40 CFR 60.482-2b(e)]
 - (1) Has no externally actuated shaft penetrating the pump housing; [40 CFR 60.482-2b(e)(1)]
 - (2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 40 CFR 60.485a(c); and [40 CFR 60.482-2b(e)(2)]
 - (3) Is tested for compliance pursuant to 40 CFR 60.482-2b(e)(2) initially upon designation, annually, and at other times requested by the Administrator. [40 CFR 60.482-2b(e)(3)]
- n. Any pump that is designated, as described in 40 CFR 60.486b(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2b(a) and (d)(4) through (6) if: [40 CFR 60.482-2b(g)]
 - (1) The permittee demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2b(a); and [40 CFR 60.482-2b(g)(1)]
 - (2) The permittee has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2B(c) if a leak is detected. [40 CFR 60.482-2b(g)(2)]

Pressure Relief Devices in Gas/Vapor Service:

- o. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485b(c). [40 CFR 60.482-4b(a)]
- p. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9b. [40 CFR 60.482-4b(b)(1)]
 - (1) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485b(c). [40 CFR 60.482-4b(b)(2)]

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

- q. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs 40 CFR 60.482-4b(a) and (b), provided the permittee complies with the requirements in 40 CFR 60.482-4a(d)(2) below: [40 CFR 60.482-4b(d)(1)]
 - (1) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9b. [40 CFR 60.482-4b(d)(2)]

Sampling Connection Systems:

- r. Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1b(c) and 40 CFR 60.482-5b(c). [40 CFR 60.482-5b(a)]
- s. Each closed-purge, closed-loop, or closed-vent system as required in 40 CFR 60.482-5b(a) shall comply with the requirements specified in 40 CFR 60.482-5b(b)(1) through (4). [40 CFR 60.482-5b(b)]
 - (1) Gases displaced during filling of the sample container are not required to be collected or captured. [40 CFR 60.482-5b(b)(1)]
 - (2) Containers that are part of a closed-purge system must be covered or closed when not being filled or emptied. [40 CFR 60.482-5b(b)(2)]
 - (3) Gases remaining in the tubing or piping between the closed-purge system valve(s) and sample container valve(s) after the valves are closed and the sample container is disconnected are not required to be collected or captured. [40 CFR 60.482-5b(b)(3)]
 - (4) Each closed-purge, closed-loop, or closed-vent system shall be designed and operated to meet requirements in either 40 CFR 60.482-5b(b)(4) (i), (ii), (iii), or (iv). [40 CFR 60.482-5b(b)(4)]
- t. In-situ sampling systems and sampling systems without purges are exempt from the requirements of 40 CFR 60.482-5b(a) and (b). [40 CFR 60.482-5b(c)]

Open-Ended Valves or Lines:

- u. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1b(c) and 40 CFR 60.482-6b(d) and (e). [40 CFR 60.482-6b(a)(1)]
 - (1) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. [40 CFR 60.482-6b(a)(2)]
- v. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6b(b)]
- w. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 CFR 60.482-6b(a) at all other times. [40 CFR 60.482-6b(c)]

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

- x. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6b(a), (b), and (c). [40 CFR 60.482-6b(d)]
- y. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6b(a) through (c) are exempt from the requirements of 40 CFR 60.482-6b(a) through (c). [40 CFR 60.482-6b(e)]

Valves in Gas/Vapor Service and in Light Liquid Service:

- z. Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485b(b) and shall comply with 40 CFR 60.482-7b(b) through (e), except as provided in 40 CFR 60.482-7b(f),(g), and (h), 40 CFR 60.482-1b(c) and (f), and 40 CFR 60.483-1b and 40 CFR 60.483-2b. [40 CFR 60.482-7b(a)(1)]
- aa. A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for the process unit must be monitored according to 40 CFR 60.482-7b(a)(2)(i) or (ii), except for a valve that replaces a leaking valve and except as provided in 40 CFR 60.482-7b(f), (g), and (h) and 40 CFR 60.482-1b(c), and 40 CFR 60.483-1b and 40 CFR 60.483-2b: [40 CFR 60.482-7b(a)(2)]
 - (1) Monitor the valve as in 40 CFR 60.482-7b(a)(1). The valve must be monitored for the first time within 30 days after the end of its startup period to ensure proper installation. [40 CFR 60.482-7b(a)(2)(i)]
 - (2) If the existing valves in the process unit are monitored in accordance with 40 CFR 60.483-1b or 40 CFR 60.483-2b, count the new valve as leaking when calculating the percentage of valves leaking as described in 40 CFR 60.483-2b(b)(5). If less than 2.0 percent of the valves are leaking for that process unit, the valve must be monitored for the first time during the next scheduled monitoring event for existing valves in the process unit or within 90 days, whichever comes first. [40 CFR 60.482-7b(a)(2)(ii)]
- bb. If an instrument reading of 100 ppm or greater is measured, a leak is detected. [40 CFR 60.482-7b(b)]
- cc. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. [40 CFR 60.482-7b(c)(1)(i)]
- dd. As an alternative to monitoring all of the valves in the first month of a quarter, the permittee may elect to subdivide the process unit into two or three subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every 3 months. The permittee must keep records of the valves assigned to each subgroup. [40 CFR 60.482-7b(c)(1)(ii)]
- ee. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7b(c)(2)]

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

- ff. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 60.482-9b. [40 CFR 60.482-7b(d)(1)]
- gg. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-7b(d)(2)]
- hh. First attempts at repair include, but are not limited to, the following best practices where practicable: [40 CFR 60.482-7b(e)]
 - (1) Tightening of bonnet bolts; [40 CFR 60.482-7b(e)(1)]
 - (2) Replacement of bonnet bolts; [40 CFR 60.482-7b(e)(2)]
 - (3) Tightening of packing gland nuts; [40 CFR 60.482-7b(e)(3)]
 - (4) Injection of lubricant into lubricated packing. [40 CFR 60.482-7b(e)(4)]
- ii. Any valve that is designated, as described in 40 CFR 60.486b(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 100 ppm above background, is exempt from the requirements of 40 CFR 60.482-7b(a) if the valve: [40 CFR 60.482-7b(f)]
 - (1) Has no external actuating mechanism in contact with the process fluid, [40 CFR 60.482-7b(f)(1)]
 - (2) Is operated with emissions less than 100 ppm above background as determined by the method specified in 40 CFR 60.485b(c), and [40 CFR 60.482-7b(f)(2)]
 - (3) Is tested for compliance with 40 CFR 60.482-7b(f)(2) initially upon designation, annually, and at other times requested by the Administrator. [40 CFR 60.482-7b(f)(3)]
- jj. Any valve that is designated, as described in 40 CFR 60.486b(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7b(a) if: [40 CFR 60.482-7b(g)]
 - (1) The permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7b(a), and [40 CFR 60.482-7b(g)(1)]
 - (2) The permittee adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7b(g)(2)]
- kk. Any valve that is designated, as described in 40 CFR 60.486b(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7b(a) if: [40 CFR 60.482-7b(h)]
 - (1) The permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface. [40 CFR 60.482-7b(h)(1)]
 - (2) The process unit within which the valve is located either: [40 CFR 60.482-7b(h)(2)]
 - (i) Becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 and was constructed on or before January 5, 1981; or [40 CFR 60.482-7b(h)(2)(i)]
 - (ii) Has less than 3.0 percent of its total number of valves designated as difficult-to-monitor by the permittee. [40 CFR 60.482-7b(h)(2)(ii)]

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- (3) The permittee follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7b(h)(3)]

Connectors in Gas/Vapor Service or Light Liquid Service:

- ll. The permittee shall initially monitor all connectors in the process unit for leaks by the later of either 12 months after the compliance date or 12 months after initial startup. If all connectors in the process unit have been monitored for leaks prior to the compliance date, no initial monitoring is required provided either no process changes have been made since the monitoring or the permittee can determine that the results of the monitoring, with or without adjustments, reliably demonstrate compliance despite process changes. If required to monitor because of a process change, the permittee is required to monitor only those connectors involved in the process change. [40 CFR 60.482-11b(a)]
- mm. Except as allowed in 40 CFR 60.482-1b(c), 40 CFR 60.482-10b, or as specified in 40 CFR 60.482-11b(e), the permittee shall monitor all connectors in gas and vapor and light liquid service as specified in 40 CFR 60.482-11b(a) and (b)(3). [40 CFR 60.482-11b(b)]
- (1) The connectors shall be monitored to detect leaks by the method specified in 40 CFR 60.485b(b) and, as applicable, 40 CFR 60.485b(c). 40 CFR 60.482-11b(b)(1)]
- (2) If an instrument reading greater than or equal to 500 ppm is measured, a leak is detected. [40 CFR 60.482-11b(b)(2)]
- (3) The permittee shall perform monitoring as specified in (i) through (iii) below, and shall comply with the requirements of (iv) and (v) below. The required period in which monitoring must be conducted shall be determined from (i) through (iii) below, using the monitoring results from the preceding monitoring period. The percent leaking connectors shall be calculated as specified in 40 CFR 60.482-11b(c). [40 CFR 60.482-11b(b)(3)]
- (i) If the percent leaking connectors in the process unit was greater than or equal to 0.5 percent, then monitor within 12 months (1 year). [40 CFR 60.482-11b(b)(3)(i)]
- (ii) If the percent leaking connectors in the process unit was greater than or equal to 0.25 percent but less than 0.5 percent, then monitor within 4 years. The permittee may comply with the requirements of 40 CFR 60.482-11a(b) by monitoring at least 40 percent of the connectors within 2 years of the start of the monitoring period, provided all connectors have been monitored by the end of the 4-year monitoring period. [40 CFR 60.482-11b(b)(3)(ii)]
- (iii) If the percent leaking connectors in the process unit was less than 0.25 percent, then monitor as provided in (A) and (B) or (C) below, as appropriate: [40 CFR 60.482-11b(b)(3)(iii)]
- (A) The permittee shall monitor at least 50 percent of the connectors within 4 years of the start of the monitoring period. [40 CFR 60.482-11b(b)(3)(iii)(A)]
- (B) If the percent of leaking connectors calculated from the monitoring results in (A) above, is greater than or equal to 0.35 percent of the monitored connectors, the permittee shall monitor as soon as practical, but within the next 6 months, all connectors that have not yet been monitored during the monitoring period. At the conclusion of monitoring, a new monitoring period shall be started pursuant to 40 CFR 60.482-11b(b)(3), based on the percent of

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

leaking connectors within the total monitored connectors. [40 CFR 60.482-11b(b)(3)(iii)(B)]

(C) If the percent of leaking connectors calculated from the monitoring results in (A) above, is less than 0.35 percent of the monitored connectors, the permittee shall monitor all connectors that have not yet been monitored within 8 years of the start of the monitoring period. [40 CFR 60.482-11b(b)(3)(iii)(C)]

(iv) If, during the monitoring conducted pursuant to 40 CFR 60.482-11b(b)(3)(i) through (iii), a connector is found to be leaking, it shall be re-monitored once within 90 days after repair to confirm that it is not leaking. [40 CFR 60.482-11b(b)(3)(iv)]

(v) The permittee shall keep a record of the start date and end date of each monitoring period under this section for each process unit. [40 CFR 60.482-11b(b)(3)(v)]

nn. For use in determining the monitoring frequency, as specified in 40 CFR 60.482-11b(a) and (b)(3), the percent leaking connectors as used in 40 CFR 60.482-11a(a) and (b)(3), shall be calculated by using the following equation: [40 CFR 60.482-11b(c)]

$$\%C_L = C_L / C_t \times 100$$

Where:

$\%C_L$ = Percent of leaking connectors as determined through periodic monitoring required in a. and b.(3)(i) through (iii) above.

C_L = Number of connectors measured at 500 ppm or greater, by the method specified in 60.485b(b).

C_t = Total number of monitored connectors in the process unit or affected facility.

oo. When a leak is detected pursuant to 40 CFR 60.482-11b(a) and (b), it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9b. A first attempt at repair as defined in 40 CFR 60, Subpart VVb shall be made no later than 5 calendar days after the leak is detected. [40 CFR 60.482-11b(d)]

pp. Any connector that is designated, as described in 40 CFR 60.486b(f)(1), as an unsafe-to-monitor connector is exempt from the requirements of 40 CFR 60.482-11b(a) and (b), if: [40 CFR 60.482-11b(e)]

(1) The permittee demonstrates that the connector is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-11b(a) and (b); and [40 CFR 60.482-11b(e)(1)]

(2) The permittee has a written plan that requires monitoring of the connector as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-11b(d), if a leak is detected. [40 CFR 60.482-11b(e)(2)]

qq. Any connector that is inaccessible or that is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined), is exempt from the monitoring requirements of 40 CFR 60.482-11b(a) and (b), from the leak repair requirements of 40 CFR 60.482-11b(d) and from the recordkeeping and reporting requirements of 40 CFR 63.1038 and 40 CFR 63.1039. An

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inaccessible connector is one that meets any of the provisions specified in 40 CFR 60.482-11b(f)(1)(i) through (iv), as applicable: [40 CFR 60.482-11b(f)(1)]

(1) Buried; [40 CFR 60.482-11b(f)(1)(i)]

(2) Insulated in a manner that prevents access to the connector by a monitor probe; [40 CFR 60.482-11b(f)(1)(ii)]

(3) Obstructed by equipment or piping that prevents access to the connector by a monitor probe; 40 CFR 60.482-11b(f)(1)(iii)

(4) Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold that would allow access to connectors up to 7.6 meters (25 feet) above the ground; 40 CFR 60.482-11b(f)(1)(iv)

(5) Inaccessible because it would require elevating the monitoring personnel more than 2 meters (7 feet) above a permanent support surface or would require the erection of scaffold; or 40 CFR 60.482-11b(f)(1)(v)

(6) Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment. 40 CFR 60.482-11b(f)(1)(vi)

rr. If any inaccessible, ceramic, or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the visual, audible, olfactory, or other indications of a leak to the atmosphere shall be eliminated as soon as practical. [40 CFR 60.482-11b(f)(2)]

ss. Except for instrumentation systems and inaccessible, ceramic, or ceramic-lined connectors meeting the provisions of 40 CFR 60.482-11b(f), identify the connectors subject to the requirements of 40 CFR 60, Subpart VVb. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of 40 CFR 60, Subpart VVb are identified as a group, and the number of connectors subject is indicated. [40 CFR 60.482-11b(g)]

Compliance Demonstration Method:

Compliance with 40 CFR 60.482-1b through 11b will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.485b. [40 CFR 60.482-1b(b)]

Refer to **3. Testing Requirements.** and **5. Specific Recordkeeping Requirements a. and b.**

2. Emission Limitations:

a. Refer to **1. Operating Limitations.**

b. The permittee shall provide the utmost care and consideration, in the handling of materials from which hazardous matter or toxic substances may be emitted, to the potentially harmful effects of the emissions resulting from such activities. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls

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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.

3. Testing Requirements:

- a. The permittee shall determine compliance with the standards in 40 CFR 60.482-1b through 40 CFR 60.482-11b, 40 CFR 60.483a, and 40 CFR 60.484b as follows: [40 CFR 60.485b(b)]
 - (1) Method 21 of appendix A-7 to 40 CFR Part 60 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: [40 CFR 60.485b(b)(1)]
 - (i) Zero air (less than 10 ppm of hydrocarbon in air); and [40 CFR 60.485b(b)(1)(i)]
 - (ii) A mixture of methane or n-hexane and air at a concentration no more than 2,000 ppm greater than the leak definition concentration of the equipment monitored. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 ppm above the concentration specified as a leak, and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 ppm. If only one scale on an instrument will be used during monitoring, the owner or operator need not calibrate the scales that will not be used during that day's monitoring. [40 CFR 60.485b(b)(1)(ii)]
 - (2) A calibration drift assessment shall be performed, at a minimum, at the end of each monitoring day. Check the instrument using the same calibration gas(es) that were used to calibrate the instrument before use. Follow the procedures specified in Method 21 of appendix A-7 of 40 CFR 60, Section 10.1, except do not adjust the meter readout to correspond to the calibration gas value. Record the instrument reading for each scale used as specified in 40 CFR 60.486b(e)(8). Divide the arithmetic difference of the initial and post-test calibration response by the corresponding calibration gas value for each scale and multiply by 100 to express the calibration drift as a percentage. [40 CFR 60.485b(b)(2)]
 - (i) If any calibration drift assessment shows a negative drift of more than 10 percent from the initial calibration value, then all equipment monitored since the last calibration with instrument readings below the appropriate leak definition and above the leak definition multiplied by (100 minus the percent of negative drift/divided by 100) must be re-monitored. [40 CFR 60.485b(b)(2)(i)]
 - (ii) If any calibration drift assessment shows a positive drift of more than 10 percent from the initial calibration value, then, at the permittee's discretion, all equipment since the last calibration with instrument readings above the appropriate leak definition and below the leak definition multiplied by (100 plus the percent of positive drift/divided by 100) may be re-monitored. [40 CFR 60.485b(b)(2)(ii)]

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

- b. The permittee shall determine compliance with the no-detectable-emission standards in 40 CFR 60.482-2b(e), 40 CFR 60.482-3b(i), 40 CFR 60.482-4b, 40 CFR 60.482-7b(f), and 40 CFR 60.482-10b(e) as follows: [40 CFR 60.485b(c)]
 - (1) The requirements of 40 CFR 60.485a(b) shall apply. [40 CFR 60.485b(c)(1)]
 - (2) Method 21 of appendix A-7 of 40 CFR 60 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485b(c)(2)]
- c. The permittee shall test each piece of equipment unless they demonstrate that a process unit is not in VOC service, *i.e.*, that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: [40 CFR 60.485b(d)]
 - (1) Procedures that conform to the general methods in ASTM E168-16, E169-16, or E260-96 shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment. [40 CFR 60.485b(d)(1)]
 - (2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid. [40 CFR 60.485b(d)(2)]
 - (3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, 40 CFR 60.485b(d)(1) and (2), shall be used to resolve the disagreement. [40 CFR 60.485b(d)(3)]
- d. The permittee shall demonstrate that a piece of equipment is in light liquid service by showing that all the following conditions apply: [40 CFR 60.485b(e)]
 - (1) The vapor pressure of one or more of the organic components is greater than 0.3 kPa at 20 °C (1.2 in. H₂O at 68 °F). Standard reference texts or ASTM D2879-23 shall be used to determine the vapor pressures. [40 CFR 60.485b(e)(1)]
 - (2) The total concentration of the pure organic components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H₂O at 68 °F) is equal to or greater than 20 percent by weight. [40 CFR 60.485b(e)(2)]
 - (3) The fluid is a liquid at operating conditions. [40 CFR 60.485b(e)(3)]

4. Specific Monitoring Requirements:

Refer to **1. Operating Limitations** and **3. Testing Requirements**.

5. Specific Recordkeeping Requirements:

- a. The permittee subject to the provisions of 40 CFR 60, Subpart VVb shall comply with the recordkeeping requirements of 40 CFR 60.486b. [40 CFR 60.486b(a)(1)]
- b. The permittee that operates more than one affected facility may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486b(a)(2)]

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

- c. The permittee shall record the information specified in 40 CFR 60.486b(a)(3)(i) through (v) for each monitoring event required by 40 CFR 60.482-2b, 60.482-3b, 60.482-7b, 60.482-8b, 60.482-11b, and 60.483-2b: [40 CFR 60.486b(a)(3)]
 - (1) Monitoring instrument identification. [40 CFR 60.486b(a)(3)(i)]
 - (2) Operator identification. [40 CFR 60.486b(a)(3)(ii)]
 - (3) Equipment identification. [40 CFR 60.486b(a)(3)(iii)]
 - (4) Date of monitoring. [40 CFR 60.486b(a)(3)(iv)]
 - (5) Instrument reading. [40 CFR 60.486b(a)(3)(v)]
- d. When each leak is detected as specified in 40 CFR 60.482-2b, 60.482-3b, 60.482-7b, 60.482-8b, 60.482-11b, and 60.483-2b, the following requirements apply: [40 CFR 60.486b(b)]
 - (1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment. [40 CFR 60.486b(b)(1)]
 - (2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7b(c) and no leak has been detected during those 2 months. [40 CFR 60.486b(b)(2)]
 - (3) The identification on a connector may be removed after it has been monitored as specified in 40 CFR 60.482-11b(b)(3)(iv) and no leak has been detected during that monitoring. [40 CFR 60.486b(b)(3)]
 - (4) The identification on equipment, except on a valve or connector, may be removed after it has been repaired. [40 CFR 60.486b(b)(4)]
- e. When each leak is detected as specified in 40 CFR 60.482-2b, 60.482-3b, 60.482-7b, 60.482-8b, 60.482-11b, and 60.483-2b, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location: [40 CFR 60.486b(c)]
 - (1) The instrument and operator identification numbers and the equipment identification number, except when indications of liquids dripping from a pump are designated as a leak. [40 CFR 60.486b(c)(1)]
 - (2) The date the leak was detected and the dates of each attempt to repair the leak. [40 CFR 60.486b(c)(2)]
 - (3) Repair methods applied in each attempt to repair the leak. [40 CFR 60.486b(c)(3)]
 - (4) Maximum instrument reading measured by Method 21 of appendix A-7 of 40 CFR 60 at the time the leak is successfully repaired or determined to be nonreparable, except when a pump is repaired by eliminating indications of liquids dripping. [40 CFR 60.486b(c)(4)]
 - (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. [40 CFR 60.486b(c)(5)]
 - (6) The signature of the operator (or designate) whose decision it was that repair could not be affected without a process shutdown. [40 CFR 60.486b(c)(6)]
 - (7) The expected date of successful repair of the leak if a leak is not repaired within 15 days. [40 CFR 60.486b(c)(7)]
 - (8) Dates of process unit shutdowns that occur while the equipment is unrepaired. [40 CFR 60.486b(c)(8)]
 - (9) The date of successful repair of the leak. [40 CFR 60.486b(c)(9)]

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

- f. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1b to 60.482-11b shall be recorded in a log that is kept in a readily accessible location: [40 CFR 60.486b(e)]
- (1) A list of identification numbers for equipment subject to 40 CFR 60, Subpart VVb. [40 CFR 60.486b(e)(1)]
 - (2) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2b(e), 60.482-3b(i), and 40 CFR 60.482-7b(f). [40 CFR 60.486b(e)(2)(i)]
 - (i) The designation of equipment as subject to the requirements of 40 CFR 60.482-2b(e), 40 CFR 60.482-3b(i), or 40 CFR 60.482-7b(f) shall be signed by the permittee. Alternatively, the permittee may establish a mechanism with the Administrator that satisfies this requirement. [40 CFR 60.486b(e)(2)(ii)]
 - (3) The dates of each compliance test as required in 40 CFR 60.482-2b(e), 60.482-3b(i), 60.482-4b, and 60.482-7b(f), the background level measured during each compliance test and the maximum instrument reading measured at the equipment during each compliance test. [40 CFR 60.486b(e)(4)]
 - (4) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486b(e)(5)]
 - (5) A list of identification numbers for equipment that the permittee designates as operating in VOC service less than 300 hr/yr in accordance with 40 CFR 60.482-1b(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr. [40 CFR 60.486b(e)(6)]
 - (6) The date and results of the weekly visual inspection for indications of liquids dripping from pumps in light liquid service. [40 CFR 60.486b(e)(7)]
 - (7) Records of the information specified in (i) through (vi) below, for monitoring instrument calibrations conducted according to sections 8.1.2 and 10 of Method 21 of appendix A-7 of 40 CFR 60 and 40 CFR 60.485b(b). [40 CFR 60.486b(e)(8)]
 - (i) Date of calibration and initials of operator performing the calibration. [40 CFR 60.486b(e)(8)(i)]
 - (ii) Calibration gas cylinder identification, certification date, and certified concentration. [40 CFR 60.486b(e)(8)(ii)]
 - (iii) Instrument scale(s) used. [40 CFR 60.486b(e)(8)(iii)]
 - (iv) A description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value in accordance with section 10.1 of Method 21 of appendix A-7 of 40 CFR 60. [40 CFR 60.486b(e)(8)(iv)]
 - (v) Results of each calibration drift assessment required by 40 CFR 60.485b(b)(2) (i.e., instrument reading for calibration at end of monitoring day and the calculated percent difference from the initial calibration value). [40 CFR 60.486b(e)(8)(v)]
 - (vi) If the permittee makes their own calibration gas, a description of the procedure used. [40 CFR 60.486b(e)(8)(vi)]
 - (8) The connector monitoring schedule for each process unit as specified in 40 CFR 60.482-11b(b)(3)(v). [40 CFR 60.486b(e)(9)]

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

- g. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7b(g) and (h), all pumps subject to the requirements of 40 CFR 60.482-2b(g), and all connectors subject to the requirements of 40 CFR 60.482-11b(e) shall be recorded in a log that is kept in a readily accessible location: [40 CFR 60.486b(f)]
 - (1) A list of identification numbers for valves, pumps, and connectors that are designated as unsafe-to-monitor, an explanation for each valve, pump, or connector stating why the valve, pump, or connector is unsafe-to-monitor, and the plan for monitoring each valve, pump, or connector. [40 CFR 60.486b(f)(1)]
 - (2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486b(f)(2)]
- h. The following information shall be recorded for valves complying with 40 CFR 60.483-2b: [40 CFR 60.486b(g)]
 - (1) A schedule of monitoring. [40 CFR 60.486b(g)(1)]
 - (2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486b(g)(2)]
- i. The following information shall be recorded in a log that is kept in a readily accessible location: [40 CFR 60.486b(h)]
 - (1) Design criterion required in 40 CFR 60.482-2b(d)(5) and 60.482-3b(e)(2) and explanation of the design criterion; and [40 CFR 60.486b(h)(1)]
 - (2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486b(h)(2)]
- j. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480b(d): [40 CFR 60.486b(i)]
 - (1) An analysis demonstrating the design capacity of the affected facility, [40 CFR 60.486b(i)(1)]
 - (2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and [40 CFR 60.486b(i)(2)]
 - (3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486b(i)(3)]
- k. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486b(j)]
- l. The provisions of 40 CFR 60.7(b) and (d) do not apply to affected facilities subject to 40 CFR 60, Subpart VVb. [40 CFR 60.486b(k)]
- m. Any records required to be maintained by 40 CFR 60, Subpart VVb that are submitted electronically via the EPA's Compliance and Emissions Data Reporting Interface (CEDRI) may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to the Administrator or the EPA as part of an on-site compliance evaluation. [40 CFR 60.486b(l)]

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

6. Specific Reporting Requirements:

- a. The permittee subject to the provisions of 40 CFR 60, Subpart VVb shall submit semiannual reports to the Administrator beginning 6 months after the initial startup date. Beginning on July 15, 2024, or once the report template for 40 CFR 60, Subpart VVb has been available on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/cedri>) for 1 year, whichever date is later, submit all subsequent reports using the appropriate electronic report template on the CEDRI website for 40 CFR 60, Subpart VVb and following the procedure specified in 40 CFR 60.487b(g). The date report templates become available will be listed on the CEDRI website. Unless the Administrator or delegated state agency or other authority has approved a different schedule for submission of reports, the report must be submitted by the deadline specified in 40 CFR 60, Subpart VVb, regardless of the method in which the report is submitted. All semiannual reports must include the following general information: company name, address (including county), and beginning and ending dates of the reporting period. [40 CFR 60.487b(a)]
- b. The initial semiannual report to the Administrator shall include the following information: [40 CFR 60.487b(b)]
 - (1) Process unit identification. [40 CFR 60.487b(b)(1)]
 - (2) Number of valves subject to the requirements of 40 CFR 60.482-7b, excluding those valves designated for no detectable emissions under the provisions of 40 CFR 60.482-7b(f). [40 CFR 60.487b(b)(2)]
 - (3) Number of pumps subject to the requirements of 40 CFR 60.482-2b, excluding those pumps designated for no detectable emissions under the provisions of 40 CFR 60.482-2b(e) and those pumps complying with 40 CFR 60.482-2b(f). [40 CFR 60.487b(b)(3)]
 - (4) Number of connectors subject to the requirements of 40 CFR 60.482-11b. [40 CFR 60.487b(b)(5)]
- c. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486b: [40 CFR 60.487b(c)]
 - (1) Process unit identification. [40 CFR 60.487b(c)(1)]
 - (2) For each month during the semiannual reporting period, [40 CFR 60.487b(c)(2)]
 - (i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7b(b) or 40 CFR 60.483-2b, [40 CFR 60.487b(c)(2)(i)]
 - (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7b(d)(1), [40 CFR 60.487b(c)(2)(ii)]
 - (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2b(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii), [40 CFR 60.487b(c)(2)(iii)]
 - (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2b(c)(1) and (d)(6), [40 CFR 60.487b(c)(2)(iv)]
 - (v) Number of connectors for which leaks were detected as described in 40 CFR 60.482-11b(b), [40 CFR 60.487b(c)(2)(vii)]
 - (vi) Number of connectors for which leaks were not repaired as required in 40 CFR 60.482-11b(d), and [40 CFR 60.487b(c)(2)(viii)]
 - (vii) The facts that explain each delay of repair and, where appropriate, why a

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

- process unit shutdown was technically infeasible. [40 CFR 60.487b(c)(2)(xi)]
- (3) Dates of process unit shutdowns which occurred within the semiannual reporting period. [40 CFR 60.487b(c)(3)]
 - (4) Revisions to items reported according to 40 CFR 60.487b(b), if changes have occurred since the initial report or subsequent revisions to the initial report. [40 CFR 60.487b(c)(4)]
- d. If the permittee elects to comply with the provisions of 40 CFR 60.483-1b or 40 CFR 60.483-2b, the permittee shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487b(d)]
 - e. The permittee shall report the results of all performance tests in accordance with 40 CFR 60.8. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of 40 CFR 60, Subpart VVb except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487b(e)]
 - f. If the permittee is required to submit notifications or reports following the procedure specified in 40 CFR 60.487b(g), the permittee must submit notifications or reports to the EPA via CEDRI, which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The EPA will make all the information submitted through CEDRI available to the public without further notice to the permittee. Do not use CEDRI to submit information the permittee claims as CBI. Although the EPA does not expect persons to assert a claim of CBI, if the permittee wish to assert a CBI claim for some of the information in the report or notification, the permittee must submit a complete file in the format specified in 40 CFR 60, Subpart Kb, including information claimed to be CBI, to the EPA following the procedures in 40 CFR 60.487b(g)(1) and (2). Clearly mark the part or all of the information that the permittee claims to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. The permittee must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described earlier in 40 CFR 60.487b(g). [40 CFR 60.487b(g)]
- (1) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address oaqpscbi@epa.gov, and as described above, should include clear CBI markings. ERT files should be flagged to the attention of the Group Leader, Measurement Policy Group; all other files should be flagged to the attention of the SOCMI NSPS Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if the permittee does not have their own file sharing service, please email oaqpscbi@epa.gov to request a file transfer link. [40 CFR 60.487b(g)(1)]

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

- (2) If the permittee cannot transmit the file electronically, the permittee may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, 109 T.W. Alexander Drive, P.O. Box 12055, Research Triangle Park, North Carolina 27711. ERT files should be sent to the attention of the Group Leader, Measurement Policy Group, and all other files should be sent to the attention of the SOCM I NSPS Sector Lead. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope. [40 CFR 60.487b(g)(2)]
- g. If the permittee is required to electronically submit notifications or reports through CEDRI in the EPA's CDX, the permittee may assert a claim of EPA system outage for failure to timely comply with that reporting requirement. To assert a claim of EPA system outage, the permittee must meet the requirements outlined in 40 CFR 60.487b(h)(1) through (7). [40 CFR 60.487b(h)]
- (1) The permittee must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems. [40 CFR 60.487b(h)(1)]
- (2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due. [40 CFR 60.487b(h)(2)]
- (3) The outage may be planned or unplanned. [40 CFR 60.487b(h)(3)]
- (4) The permittee must submit notification to the Administrator in writing as soon as possible following the date the permittee first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting. [40 CFR 60.487b(h)(4)]
- (5) The permittee must provide to the Administrator a written description identifying: [40 CFR 60.487b(h)(5)]
- (i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable; [40 CFR 60.487b(h)(5)(i)]
- (ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage; [40 CFR 60.487b(h)(5)(ii)]
- (iii) A description of measures taken or to be taken to minimize the delay in reporting; and [40 CFR 60.487b(h)(5)(iii)]
- (iv) The date by which the permittee proposes to report, or if the permittee has already met the reporting requirement at the time of the notification, the date the permittee reported. [40 CFR 60.487b(h)(5)(iv)]
- (6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator. [40 CFR 60.487b(h)(6)]
- (7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. [40 CFR 60.487b(h)(7)]
- h. If the permittee is required to electronically submit notifications or reports through CEDRI in the EPA's CDX, the permittee may assert a claim of force majeure for failure to timely comply with that reporting requirement. To assert a claim of force majeure, the

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

permittee must meet the requirements outlined in 40 CFR 60.487b(i)(1) through (5). [40 CFR 60.487b(i)]

- (1) The permittee may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of 40 CFR 60.487b, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the permittee from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage). [40 CFR 60.487b(i)(1)]
- (2) The permittee must submit notification to the Administrator in writing as soon as possible following the date the permittee first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting. [40 CFR 60.487b(i)(2)]
- (3) The permittee must provide to the Administrator: [40 CFR 60.487b(i)(3)]
 - (i) A written description of the force majeure event; [40 CFR 60.487b(i)(3)(i)]
 - (ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; [40 CFR 60.487b(i)(3)(ii)]
 - (iii) A description of measures taken or to be taken to minimize the delay in reporting; and [40 CFR 60.487b(i)(3)(iii)]
 - (iv) The date by which the permittee proposes to report, or if the permittee has already met the reporting requirement at the time of the notification, the date the permittee reported. [40 CFR 60.487b(i)(3)(iv)]
- (4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator. [40 CFR 60.487b(i)(4)]
- (5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. [40 CFR 60.487b(i)(5)]

i. Refer to **Section F**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**RMH-2 – Oleum Operations****RMH-2A - Oleum Tank****Description:**

Capacity: 45,358 gallons
Liquid Stored: Oleum
Maximum Annual Throughput: 2,423,016 gallons per year
Controls: Oleum Scrubber (02-Z0006)

RMH-2B – Oleum Tanker Truck**Description**

Liquid Service: Oleum
Controls: Oleum Scrubber (02-Z0006)

RMH-2C – Oleum Blending Surge Tank**Description**

Liquids Blended: Oleum and Sulfuric Acid
Maximum Annual Throughput: 2,423,016 gallons per year
Controls: Oleum Scrubber (02-Z0006) (during blending)
Vapor Balance Loading System (during oleum loading)

APPLICABLE REGULATIONS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*. [State-Origin Requirement]

1. Operating Limitations:

The permittee shall operate the oleum scrubber at all times, in accordance with manufacturer recommended procedures or best engineering practices. [401 KAR 52:020, Section 10]

Compliance Demonstration Method:

Refer to **5. Specific Recordkeeping Requirements a.**

2. Emission Limitations:

- a. The permittee shall provide the utmost care and consideration, in the handling of materials from which hazardous matter or toxic substances may be emitted, to the potentially harmful effects of the emissions resulting from such activities. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. 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.

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

- b. Refer to **Section D.3.** for source-wide emission limitations on SO_x.

3. Testing Requirements:

Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the oleum throughput emission unit RMH-2A in Mgal on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall monitor sulfuric acid transferred to RMH-2C in Mgal on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep records of manufacturer's specifications or best engineering practices for the oleum scrubber. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of the oleum throughput in Mgal on a monthly basis. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain records of sulfuric acid transferred to RMH-2C in Mgal on a monthly basis. [401 KAR 52:020, Section 10]
- d. Refer to **Section F.**

6. Specific Reporting Requirements:

Refer to **Section F.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**RMH-4 – Tanks Controlled by the Nitric Acid Scrubber****RMH-4A – 98% Nitric Acid Tank****Description:**

Construction Date:	December 2026 (Proposed)
Capacity:	42,575 gallons
Liquid Stored:	Concentrated (98%) Nitric Acid
Maximum Annual Throughput:	2,401,992 gallons per year
Controls:	Nitric Acid Scrubber

RMH-4B – Weak Nitric Acid Tank**Description:**

Construction Date:	December 2026 (Proposed)
Capacity:	8,338 gallons
Liquid Stored:	Diluted (55%) Nitric Acid
Maximum Annual Throughput:	1,282,464 gallons per year
Controls:	Nitric Acid Scrubber

RMH-4C – Spent Acid Tank**Description:**

Construction Date:	December 2026 (Proposed)
Capacity:	56,559 gallons
Liquid Stored:	Blend of Sulfuric, Nitric, & Nitrous Acids, Water, and Trace Organics
Maximum Annual Throughput:	5,493,804 gallons per year
Controls:	Nitric Acid Scrubber

APPLICABLE REGULATIONS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*. (State-Origin Requirement)

1. Operating Limitations:

The permittee shall operate the nitric acid scrubber at all times, in accordance with manufacturer recommended procedures or best engineering practices. [401 KAR 52:020, Section 10]

Compliance Demonstration Method:

Refer to **5. Specific Recordkeeping Requirements a.**

2. Emission Limitations:

- a. The permittee shall provide the utmost care and consideration, in the handling of materials from which hazardous matter or toxic substances may be emitted, to the potentially harmful effects of the emissions resulting from such activities. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. 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]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**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. Refer to **Section D.3.** for source-wide emission limitations on NO_x and SO_x.

3. Testing Requirements:

Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

The permittee shall monitor the throughput of each tank in Mgal on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep records of manufacturer's specifications or best engineering practices for the Nitric Acid scrubber. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of the throughput of each tank in Mgal on a monthly basis. [401 KAR 52:020, Section 10]
- c. Refer to **Section F.**

6. Specific Reporting Requirements:

Refer to **Section F.**

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

NO_x Absorption Column/ Thermal Oxidizer Control Train

TNT-1 – Nitration + Washers 1 & 2

Description:

Toluene, weak nitric acid (WNA) and oleum are fed to the Extractor and nitration reactors (nitrators). Toluene is fed to the Extractor and Nitrator #1 and oleum is fed to the final nitrator. WNA is fed to the Nitrator #1 and concentrated nitric acid (CNA) is fed to subsequent nitrators. To form TNT, three nitro groups must be added to the toluene molecule. The introduction of the first nitro group to form MNT is carried out at low temperatures with weak nitric acid. Increasingly higher temperatures and stronger acids are then required for the stepwise conversion of MNT to DNT then DNT to TNT through subsequent nitrators. The nitrators are cylindrical vessels each provided with an agitator, cooling coil and a liquid-to-liquid dynamic separator. Crude TNT and spent acid leave the system in a constant flow. Steam, nitrogen, nitrogen oxide (NO_x), carbon monoxide (CO), carbon dioxide (CO₂), and other organics are vented from the nitrators to the NO_x Absorber and the Thermal Oxidizer in the Acid Recovery Unit (ARU) area. Tetranitromethane (TNM), a VOC generated as a byproduct of nitration, is controlled by the Thermal Oxidizer. NO_x generated from the combustion of TNM is not controlled by the NO_x Absorber.

The purification of crude TNT involves the removal of mineral acids, oxidation products and unsymmetrical TNT. Each Washer is a cylindrical vessel provided with agitator, heating jacket (circulating hot water) and a liquid-to-liquid Dynamic Separator. The removal of mineral acids and some of the oxidation products is accomplished by washing the molten TNT with hot water in Washers #1 & 2. Washers #1 & 2 are also vented to the NO_x Absorber and Thermal Oxidizer in the ARU area.

Manufacturer:	CWR
Construction Date:	December 2026 (Proposed)

Process ID 1 – TNT Manufacturing

Maximum Throughput:	4.07 tons/hr
Controls:	NO _x Absorption Column (Packed bed scrubber) Thermal Oxidizer

Process ID 2 – TNM Control

Maximum Throughput:	1.10 tons/hr *TNT Produced
Controls:	Thermal Oxidizer

ARU-1 – Acid Recovery Unit

Description:

The purpose of the Acid Recovery Unit (ARU) is to remove contaminants from spent acids and recover useful materials that can be recycled back to the TNT production process. The ARU area receives spent acid containing nitric acid, sulfuric acid, water, MNT and DNT from Nitration. The ARU area includes the NO_x Absorber which is a scrubber for NO_x from nitration operations and the other ARU process units. Process steps in the ARU include the Denitration Unit (DENI), Organic Stripper, Sulfuric Acid Concentrators, Nitric Acid Concentrators (NAC), NO_x

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

Absorber, and Solvent Extraction Unit (Emission Unit ARU-2). The NO_x absorber is a control device for NO_x only.

Manufacturer: De Dietrich
Construction Date: December 2026 (Proposed)

Process ID 1 – Acid Recovery Unit Vents
Maximum Throughput: 4.05 tons/hr
Controls: NO_x Absorption Column (Packed bed scrubber)
Thermal Oxidizer

Process ID 2 – Thermal Oxidizer Burner
Manufacturer: UOP Honeywell
Supplemental Fuel: Natural Gas
Maximum continuous rating: 2.4 MMBtu/hr

RMH-5 – NA50 Tank**Description:**

The weak nitric acid from the Nitric Acid Scrubber and NO_x Absorber are stored in the NA50 Tank before being processed to CNA in the ARU NAC.

Construction Date: December 2026 (Proposed)
Capacity: 8,616 gallons
Liquid Stored: Diluted (50%) Nitric Acid
Maximum Annual Throughput: 809,424 gallons per year
Controls: NO_x Absorption Column (Packed bed scrubber)

APPLICABLE REGULATIONS:

401 KAR 60:005, Section 2(2)(yyy), 40 C.F.R. 60.660a through 60.670a, Tables 1 through 4 (**Subpart NNNa**), *Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations for Which Construction, Reconstruction, or Modification Commenced After April 25, 2023*. (Applies to ARU-1)

401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.660a through 60.670a, Tables 1 through 4 (**Subpart RRRa**), *Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes for Which Construction, Reconstruction, or Modification Commenced After April 25, 2023*. (Applies to TNT-1)

STATE-ORIGIN REQUIREMENTS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*. (Applies to ARU-1)

1. Operating Limitations:

- a. The affected facility for 40 CFR 60, Subpart NNNa, is each distillation unit not discharging its vent stream into a recovery system. [40 CFR 60.660a(b) and 40 CFR 60.660a(b)(1)]

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

- b. The affected facility for 40 CFR 60, Subpart RRRa, is each reactor process not discharging its vent stream into a recovery system. [40 CFR 60.700a(b) and 40 CFR 60.700a(b)(1)]
- c. The permittee may designate a vent stream as a maintenance vent if the vent is only used as a result of startup, shutdown, maintenance, or inspection of equipment where equipment is emptied, depressurized, degassed, or placed into service. The permittee must comply with the applicable requirements in 40 CFR 60.662a(c)(1) through (3) or 40 CFR 60.702a(c)(1) through (3) for each maintenance vent. Any vent stream designated as a maintenance vent is only subject to the maintenance vent provisions in 40 CFR 60.662a(c) or 40 CFR 60.702a(c) and the associated recordkeeping and reporting requirements in 40 CFR 60.665a(g) or 40 CFR 60.705a(g), respectively. [40 CFR 60.662a(c) and 40 CFR 60.702a(c)]
 - (1) Prior to venting to the atmosphere, remove process liquids from the equipment as much as practical and depressurize the equipment to: using any combination of a non-flare control device or recovery device meeting the requirements in table 1 to 40 CFR 60, Subpart NNNa or 40 CFR 60, Subpart RRRa until one of the following conditions, as applicable, is met. [40 CFR 60.662a(c)(1) and 40 CFR 60.702a(c)(1)]
 - (i) The vapor in the equipment served by the maintenance vent has a lower explosive limit (LEL) of less than 10 percent. [40 CFR 60.662a(c)(1)(i) and 40 CFR 60.702a(c)(1)(i)]
 - (ii) If there is no ability to measure the LEL of the vapor in the equipment based on the design of the equipment, the pressure in the equipment served by the maintenance vent is reduced to 5 pounds per square inch gauge (psig) or less. Upon opening the maintenance vent, active purging of the equipment cannot be used until the LEL of the vapors in the maintenance vent (or inside the equipment if the maintenance vent is a hatch or similar type of opening) is less than 10 percent. [40 CFR 60.662a(c)(1)(ii) and 40 CFR 60.702a(c)(1)(ii)]
 - (iii) The equipment served by the maintenance vent contains less than 50 pounds of total VOC. [40 CFR 60.662a(c)(1)(iii) and 40 CFR 60.702a(c)(1)(iii)]
 - (iv) If, after applying best practices to isolate and purge equipment served by a maintenance vent, none of the applicable criterion in 40 CFR 60.662a(c)(1)(i) through (iii) or 40 CFR 60.702a(c)(1)(i) through (iii) can be met prior to installing or removing a blind flange or similar equipment blind, then the pressure in the equipment served by the maintenance vent must be reduced to 2 psig or less before installing or removing the equipment blind. During installation or removal of the equipment blind, active purging of the equipment may be used provided the equipment pressure at the location where purge gas is introduced remains at 2 psig or less. [40 CFR 60.662a(c)(1)(iv) and 40 CFR 60.702a(c)(1)(iv)]
 - (2) Except for maintenance vents complying with the alternative in 40 CFR 60.662a(c)(1)(iii) or 40 CFR 60.702a(c)(1)(iii), the permittee must determine the LEL or, if applicable, equipment pressure using process instrumentation or portable measurement devices and follow procedures for calibration and maintenance according to manufacturer's specifications. [40 CFR 60.662a(c)(2) and 40 CFR 60.702a(c)(2)]

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

- (3) For maintenance vents complying with the alternative in 40 CFR 60.662a(c)(1)(iii) or 40 CFR 60.702a(c)(1)(iii), the permittee must determine mass of VOC in the equipment served by the maintenance vent based on the equipment size and contents after considering any contents drained or purged from the equipment. Equipment size may be determined from equipment design specifications. Equipment contents may be determined using process knowledge. [40 CFR 60.662a(c)(3) and 40 CFR 60.702a(c)(3)]

Compliance Demonstration Method:

Refer to **5. Specific Recordkeeping Requirements d.**

- d. Leaks, as indicated by an instrument reading greater than 500 parts per million above background or by visual, audio, or olfactory inspections, must be repaired as soon as practicable, except as provided in 40 CFR 60.670a(d) or 40 CFR 60.710a(d). [40 CFR 60.670a(c) and or 40 CFR 60.710a(c)]
- (1) A first attempt at repair must be made no later than 5 calendar days after the leak is detected. [40 CFR 60.670a(c)(1) 40 CFR 60.710a(c)(1)]
- (2) Repair must be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.670a(c)(2) 40 CFR 60.710a(c)(2)]
- e. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a shutdown, as defined in 40 CFR 60.2, or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment must be complete by the end of the next shutdown. [40 CFR 60.670a(d) and 40 CFR 60.710a(d)]
- f. For each closed vent system that contains bypass lines that could divert a vent stream away from the control device and to the atmosphere, the permittee must comply with the provisions of either 40 CFR 60.670a(e)(1) or (2) or 40 CFR 60.710a(e)(1) or (2), except as specified in 40 CFR 60.670a(e)(3) or 40 CFR 60.710a(e)(3). [40 CFR 60.670a(e) and 40 CFR 60.710a(e)]
- (1) Install, calibrate, maintain, and operate a flow indicator that determines whether vent stream flow is present at least once every 15 minutes. The permittee must keep hourly records of whether the flow indicator was operating and whether a diversion was detected at any time during the hour, as well as records of the times and durations of all periods when the vent stream is diverted to the atmosphere or the flow indicator is not operating. The flow indicator must be installed at the entrance to any bypass line; or [40 CFR 60.670a(e)(1) and 40 CFR 60.710a(e)(1)]
- (2) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure the valve is maintained in the closed position and the vent stream is not diverted through the bypass line. [40 CFR 60.670a(e)(2) and 40 CFR 60.710a(e)(2)]
- (3) Open-ended valves or lines that use a cap, blind flange, plug, or second valve and follow the requirements specified in 40 CFR 60.482-6(a)(2), (b), and (c) or follow requirements codified in another regulation that are the same as 40 CFR 60.482-

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6(a)(2), (b), and (c) are not subject to 40 CFR 60.670a(e) or 40 CFR 60.710a(e). [40 CFR 60.670a(e)(3) and 40 CFR 60.710a(e)(3)]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** h. through k. and **5. Specific Recordkeeping Requirements** e.

2. Emission Limitations:

- a. The permittee must comply with the emission limits and standards specified in table 1 to 40 CFR 60, Subpart NNNa and table 1 to 40 CFR 60, Subpart RRRa and the requirements specified in 40 CFR 60.662a(b) and (c) and 40 CFR 60.702a(b) and (c) for each vent stream on and after the date on which the initial performance test required by 40 CFR 60.8 and 40 CFR 60.664a and 40 CFR 60.704a is completed, but not later than 60 days after achieving the maximum production rate at which the affected facility will be operated, or 180 days after the initial start-up, whichever date comes first. The standards in 40 CFR 60.662a and 40 CFR 60.702a apply at all times, including periods of startup, shutdown and malfunction. As provided in 40 CFR 60.11(f), the provisions of 40 CFR 60.662a(a) or 40 CFR 60.702a(a) supersedes the exemptions for periods of startup, shutdown and malfunction in the general provisions in 40 CFR 60, Subpart A. [40 CFR 60.662a(a) and 40 CFR 60.702a(a)]
 - (1) For each vent stream, the permittee must reduce emissions of TOC (minus methane and ethane) by 98 weight-percent, or to a TOC (minus methane and ethane) concentration of 20 ppmv on a dry basis corrected to 3 percent oxygen by venting emissions through a closed vent system to any combination of non-flare control devices and/or recovery system and meet the requirements specified in 40 CFR 60.663a and 40 CFR 60.670a and 40 CFR 60.703a and 40 CFR 60.710a. [Item 1.a. of Table 1 to 40 CFR 60, Subpart NNNa and Item 1.a. of Table 1 to 40 CFR 60, Subpart RRRa]
- b. The following release events from an affected facility are a violation of the emission limits and standards specified in table 1 to 40 CFR 60, Subpart NNNa and table 1 to 40 CFR 60, Subpart RRRa. [40 CFR 60.662a(b) and 60.702a(b)]
 - (1) Any relief valve discharge to the atmosphere of a vent stream. [40 CFR 60.662a(b)(1) and 40 CFR 60.702a(b)(1)]
 - (2) The use of a bypass line at any time on a closed vent system to divert emissions to the atmosphere, or to a control device not meeting the requirements specified in 40 CFR 60.663a and 40 CFR 60.703a. [40 CFR 60.662a(b)(2) and 40 CFR 60.702a(b)(2)]

Compliance Demonstration Method:

Refer to **3. Testing Requirements**, **4. Specific Monitoring Requirements**, **5. Specific Recordkeeping Requirements** a. through c. and e.(3), and **6. Specific Reporting Requirements** b. through d.

- c. The permittee shall provide the utmost care and consideration, in the handling of materials from which hazardous matter or toxic substances may be emitted, to the potentially harmful effects of the emissions resulting from such activities. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic

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

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 toxic 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. 3.** for source-wide emission limitations on CO and NO_x to preclude 401 KAR 51:017.

Compliance Demonstration Method:

(a) For CO: see **7. Specific Control Equipment Operating Conditions**

(b) For NO_x: see **4. Specific Monitoring Requirements** k. through n., **5. Specific Recordkeeping Requirements** i. and j., and **6. Specific Reporting Requirements** i. and j.

(c) Uncontrolled emissions from Emergency Venting events must be tracked according to **4. Specific Monitoring Requirements** j. See **5. Specific Recordkeeping Requirements** h. and **6. Specific Reporting Requirements** h.

3. Testing Requirements:

- a. For the purpose of demonstrating compliance with the emission limits and standards specified in table 1 to 40 CFR 60, Subpart NNNa or table 1 to 40 CFR 60, Subpart RRRa, all affected facilities must be run at full operating conditions and flow rates during any performance test. [40 CFR 60.664a(a) and 40 CFR 60.704a(a)]
- (1) Conduct initial performance tests no later than the date required by 40 CFR 60.8(a). [40 CFR 60.664a(a)(1) and 40 CFR 60.704a(a)(1)]
- (2) Conduct subsequent performance tests no later than 60 calendar months after the previous performance test. [40 CFR 60.664a(a)(2) and 40 CFR 60.704a(a)(2)]
- b. The following methods, except as provided in 40 CFR 60.8(b), must be used as reference methods to determine compliance with the emission limit or percent reduction efficiency specified in table 1 to 40 CFR 60, Subpart NNNa or table 1 to 40 CFR 60, Subpart RRRa for non-flare control devices and/or recovery systems. [40 CFR 60.664a(b) and 40 CFR 60.704a(b)]
- (1) Method 1 or 1A of appendix A-1 to 40 CFR part 60, as appropriate, for selection of the sampling sites. The inlet sampling site for determination of vent stream molar composition or TOC (less methane and ethane) reduction efficiency shall be prior to the inlet of the control device or, if equipped with a recovery system, then prior to the inlet of the first recovery device in the recovery system. [40 CFR 60.664a(b)(1) and 40 CFR 60.704a(b)(1)]

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- (2) Method 2, 2A, 2C, or 2D of appendix A-1 to 40 CFR part 60, as appropriate, for determination of the gas volumetric flow rates. [40 CFR 60.664a(b)(2) and 40 CFR 60.704a(b)(2)]
- (3) Method 3A of appendix A-2 to 40 CFR part 60 or the manual method in ANSI/ASME PTC 19.10-1981 – Part 10 (incorporated by reference, see 40 CFR 60.17) must be used to determine the oxygen concentration (%O_{2d}) for the purposes of determining compliance with the 20 ppmv limit. The sampling site must be the same as that of the TOC samples, and the samples must be taken during the same time that the TOC samples are taken. The TOC concentration corrected to 3 percent O₂ (C_c) must be computed using equation 1 to 40 CFR 60.664a(b)(3) or equation 1 to 40 CFR 60.704a(b)(3): [40 CFR 60.664a(b)(3) and 40 CFR 60.704a(b)(3)]

$$C_c = C_{\text{TOC}} \frac{17.9}{20.9 - \%O_{2d}}$$

Where: C_c = Concentration of TOC corrected to 3 percent O₂, dry basis, ppm by volume.

C_{TOC} = Concentration of TOC (minus methane and ethane), dry basis, ppm by volume.

%O_{2d} = Concentration of O₂, dry basis, percent by volume.

- (4) Method 18 of appendix A-6 to 40 CFR part 60 to determine the concentration of TOC in the control device outlet or in the outlet of the final recovery device in a recovery system, and to determine the concentration of TOC in the inlet when the reduction efficiency of the control device or recovery system is to be determined. ASTM D6420-18 (incorporated by reference, see 40 CFR 60.17) may be used in lieu of Method 18, if the target compounds are all known and are all listed in section 1.1 of ASTM D6420-18 as measurable; ASTM D6420-18 may not be used for methane and ethane; and ASTM D6420-18 must not be used as a total VOC method. [40 CFR 60.664a(b)(4) and 40 CFR 60.704a(b)(4)]
- (i) The sampling time for each run must be 1 hour in which either an integrated sample or at least four grab samples must be taken. If grab sampling is used then the samples must be taken at 15-minute intervals. [40 CFR 60.664a(b)(4)(i) and 40 CFR 60.704a(b)(4)(i)]
- (ii) The emission reduction (R) of TOC (minus methane and ethane) must be determined using equation 2 to 40 CFR 60.664a(b)(4)(ii) or equation 2 to 40 CFR 60.704a(b)(4)(ii): [40 CFR 60.664a(b)(4)(ii) and 40 CFR 60.704a(b)(4)(ii)]

$$R = \frac{E_i - E_o}{E_i} \times 100$$

Where: R = Emission reduction, percent by weight

E_i = Mass rate of TOC entering the control device or recovery system, kg/hr (lb/hr)

E_o = Mass rate of TOC discharged to the atmosphere, kg/hr (lb/hr)

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- (iii) The mass rates of TOC (E_i , E_o) must be computed using equations 3 and 4 to 40 CFR 60.664a(b)(4)(iii) or equations 3 and 4 to 40 CFR 60.704a(b)(4)(iii): [40 CFR 60.664a(b)(4)(iii) and 40 CFR 60.704a(b)(4)(iii)]

$$E_i = K_2 \left(\sum_{j=1}^n C_{ij} M_{ij} \right) Q_i$$

$$E_o = K_2 \left(\sum_{j=1}^n C_{oj} M_{oj} \right) Q_o$$

Where:

- C_{ij} , C_{oj} = Concentration of sample component “j” of the gas stream at the inlet and outlet of the control device or recovery system, respectively, dry basis, ppm by volume.
- M_{ij} , M_{oj} = Molecular weight of sample component “j” of the gas stream at the inlet and outlet of the control device or recovery system, respectively, g/g-mole (lb/lb-mole).
- Q_i , Q_o = Flow rate of gas stream at the inlet and outlet of the control device or recovery system, respectively, dscm/min (dscf/min).
- K_2 = 2.494×10^{-6} (1/ppm)(g-mole/scm) (kg/g) (min/hr) (metric units), where standard temperature for (g-mole/scm) is 20 °C.
 = 1.557×10^{-7} (1/ppm) (lb-mole/scf) (min/hr) (English units), where standard temperature for (lb-mole/scf) is 68 °F.

- (iv) The TOC concentration (C_{TOC}) is the sum of the individual components and must be computed for each run using equation 5 to 40 CFR 60.664a(b)(4)(iv) or equation 5 to 40 CFR 60.704a(b)(4)(iv): [40 CFR 60.664a(b)(4)(iv) and 40 CFR 60.704a(b)(4)(iv)]

$$C_{TOC} = \sum_{j=1}^n C_j$$

Where:

- C_{TOC} = Concentration of TOC (minus methane and ethane), dry basis, ppm by volume.
- C_j = Concentration of sample components “j”, dry basis, ppm by volume.
- n = Number of components in the sample.

- c. The permittee shall conduct an initial performance test to determine an uncontrolled CO emission factor and CO control efficiency of the Thermal Oxidizer concurrently with the initial performance test required by **3. Testing Requirements a(1)**. The permittee shall use the methods and procedures specified in **3. Testing Requirements b.**, except that “CO” should be substituted for “TOC”, Method 10 or Method 10B, as appropriate, shall be used instead of Method 18. Subsequent performance tests shall be conducted concurrently with the subsequent performance test required by **3. Testing Requirements a(2)**. In addition to the emission reduction rate for CO (R), the CO emission factor (EF_{CO})

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for emission unit TNT-1, Process ID 1 shall be calculated using the following equation:
[401 KAR 52:020, Section 10]

$$EF_{CO} = \frac{E_{i,CO}}{P}$$

Where:

- EF_{CO} = CO emission factor, lb/ton
- $E_{i,CO}$ = Emission rate of CO entering the control device, lb/hr
- P = Production rate of TNT-1, tons/hr

- d. Establish the applicable minimum, maximum, or range for the operating parameter limit as specified in table 3 to 40 CFR 60, Subpart NNNa or table 3 to 40 CFR 60, Subpart RRRa or established according to 40 CFR 60.663a(c) or 40 CFR 60.703a(c) by calculating the value(s) as the arithmetic average of operating parameter measurements recorded during the three test runs conducted for the most recent performance test. The permittee may operate outside of the established operating parameter limit(s) during subsequent performance tests in order to establish new operating limits. The permittee must include the updated operating limits with the performance test results submitted to the Administrator pursuant to 40 CFR 60.665a(b) or 40 CFR 60.705a(b). Upon establishment of a new operating limit, the permittee must thereafter operate under the new operating limit. If the Administrator determines that the permittee did not conduct the performance test in accordance with the applicable requirements or that the operating limit established during the performance test does not correspond to the conditions specified in 40 CFR 60.664a(a) or 40 CFR 60.704a(a), then the permittee must conduct a new performance test and establish a new operating limit. [40 CFR 60.663a(a)(2) and 40 CFR 60.703a(a)(2)]
 - (1) For the firebox temperature of the Thermal Oxidizer, the permittee must establish the minimum firebox temperature. [Item 14. of Table 3 to 40 CFR 60, Subpart NNNa and Item 14. of Table 3 to 40 CFR 60, Subpart RRRa]
- e. If the permittee elects to place the NO_x CEMS at the location described by **4. Specific Monitoring Requirements** l(2), the permittee shall conduct an initial performance test concurrently with the initial performance test required by **3. Testing Requirements** a(1) to determine an emission factor for NO_x from emission unit TNT-1, Process ID 02. Subsequent performance tests shall be conducted concurrently with the subsequent performance test required by **3. Testing Requirements** a(2). The following methods and reporting requirements shall be followed: [401 KAR 52:020, Section 10]
 - (1) Method 1 or 1A of appendix A-1 to 40 CFR part 60, as appropriate, for selection of the sampling site. The sampling sites shall be:
 - (i) Between the NO_x Absorber and Thermal Oxidizer (inlet); and
 - (ii) After the Thermal Oxidizer prior to discharge to the atmosphere (outlet).
 - (2) Method 2, 2A, 2C, or 2D of appendix A-1 to 40 CFR part 60, as appropriate, for determination of the gas volumetric flow rates, or an equivalent method subject to approval by the Division.
 - (3) Method 7E of appendix A-4 to 40 CFR part 60 for determination of NO_x emissions, or an equivalent method subject to approval by the Division.

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(4) *Test report requirements.* Results of a performance test shall include the analysis of samples, determination of emissions, and raw data. The following information must be included in the test report:

- (i) The mass emission rates of NO_x (E_i, E_o) must be computed using the following equations:

:

$$E_i = K_2 \left(\sum_{j=1}^n C_{ij} M_j \right) Q_i$$

$$E_o = K_2 \left(\sum_{j=1}^n C_{oj} M_j \right) Q_o$$

Where:

- E_i = Mass rate of NO_x entering the thermal oxidizer, lb/hr
 E_o = Mass rate of NO_x exiting the thermal oxidizer, lb/hr
 C_{ij}, C_{oj} = Concentration of sample component “j” (NO or NO₂) of the gas stream at the inlet and outlet of the thermal oxidizer, respectively, dry basis, ppm by volume.
 M_j, M_j = Molecular weight of sample component “j” (NO or NO₂) of the gas stream, lb/lb-mole.
 Q_i, Q_o = Flow rate of gas stream at the inlet and outlet of the NO_x absorption column, respectively, dscf/min.
 K₂ = 1.557 × 10⁻⁷ (1/ppm) (lb-mole/scf) (min/hr) (English units), where standard temperature for (lb-mole/scf) is 68 °F.
- (ii) An emission factor for NO_x from combustion of TNM accounted for under emission unit TNT-1, Process ID 02 (EF_{TNT-1(2)}) must be calculated using the following equation:

$$EF_{TNT-1(2)} = \frac{E_o - E_i}{P}$$

Where:

- P = TNT Production Rate during the performance test, tons/hr

4. Specific Monitoring Requirements:

- a. Except as specified in 40 CFR 60.663a(a)(5) through (7) or 40 CFR 60.703a(a)(5) through (7), the permittee must comply with 40 CFR 60.663a(a)(1) through (4), (b), and (c) and 40 CFR 60.703a(1) through (4), (b), and (c). [40 CFR 60.663a(a) and 40 CFR 60.703a(a)]
- (1) Install a continuous parameter monitoring system(s) (CPMS) and monitor the operating parameter(s) applicable to the control device or recovery system as specified in table 2 to 40 CFR 60, Subpart NNNa or table 2 to 40 CFR 60, Subpart RRRa or established according to 40 CFR 60.663a(c) or 40 CFR 60.703a(c). [40 CFR 60.663a(a)(1) and 40 CFR 60.703a(a)(1)]
 - (2) Monitor, record, and demonstrate continuous compliance using the minimum frequencies specified in table 3 to 40 CFR 60, Subpart NNNa or table 3 to 40 CFR 60, Subpart RRRa or established according to 40 CFR 60.663a(c) or 40 CFR

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- 60.703a(c). [40 CFR 60.663a(a)(3) and 40 CFR 60.703a(a)(3)]
- (3) Comply with the calibration and quality control requirements as specified in table 4 to 40 CFR 60, Subpart NNNa or table 4 to 40 CFR 60, Subpart RRRa or established according to 40 CFR 60.663a(c) or 40 CFR 60.703a(c) that are applicable to the CPMS used. [40 CFR 60.663a(a)(4) and 40 CFR 60.703a(a)(4)]
- b. For all control and recovery devices, monitor the following parameters: [Table 2 to 40 CFR 60, Subpart NNNa and Table 2 to 40 CFR 60, Subpart RRRa]
- (1) Presence of flow diverted to the atmosphere from the control and recovery device; or [Item 1.a. of Table 2 to 40 CFR 60, Subpart NNNa and Item 1.a. of Table 2 to 40 CFR 60, Subpart RRRa]
- (2) Monthly inspection of sealed valves. [Item 1.b. of Table 2 to 40 CFR 60, Subpart NNNa and Item 1.b. of Table 2 to 40 CFR 60, Subpart RRRa]
- c. For the thermal incinerator (Thermal Oxidizer), monitor firebox temperature. The temperature monitor may be installed in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange is encountered. [Item 9. and footnote a of Table 2 to 40 CFR 60, Subpart NNNa and Item 9. and footnote a of Table 2 to 40 CFR 60, Subpart RRRa]
- d. For each of the parameters established pursuant to **4. Specific Monitoring Requirements** c., monitor, record, and demonstrate continuous compliance using the minimum frequencies as specified below: [Items 1., 2., and 14. of Table 3 to 40 CFR 60, Subpart NNNa and Items 1., 2., and 14. of Table 3 to 40 CFR 60, Subpart RRRa]
- (1) Data measurement: Continuous
- (2) Data recording: Every 15 minutes
- (3) Data averaging period for compliance: 3-hour block average
- e. For temperature monitoring required by **4. Specific Monitoring Requirements** c., comply with the accuracy requirements specified in (1) and (2) below and the calibration requirements specified in (3) through (5) below: [Item 1. of Table 4 to 40 CFR 60, Subpart NNNa and Item 1. of Table 4 to 40 CFR 60, Subpart RRRa]
- (1) ± 1 percent over the normal range of temperature measured or 2.8 degrees Celsius (5 degrees Fahrenheit), whichever is greater, for non-cryogenic temperature ranges. [Item 1.a. of Table 4 to 40 CFR 60, Subpart NNNa and Item 1.a. of Table 4 to 40 CFR 60, Subpart RRRa]
- (2) ± 2.5 percent over the normal range of temperature measured or 2.8 degrees Celsius (5 degrees Fahrenheit), whichever is greater, for cryogenic temperature ranges. [Item 1.b. of Table 4 to 40 CFR 60, Subpart NNNa and Item 1.b. of Table 4 to 40 CFR 60, Subpart RRRa]
- (3) Performance evaluation annually and following any period of more than 24 hours throughout which the temperature exceeded the maximum rated temperature of the sensor, or the data recorder was off scale. [Item 1.c. of Table 4 to 40 CFR 60, Subpart NNNa and Item 1.c. of Table 4 to 40 CFR 60, Subpart RRRa]
- (4) Visual inspections and checks of CPMS operation every 3 months, unless the CPMS has a redundant temperature sensor. [Item 1.d. of Table 4 to 40 CFR 60, Subpart NNNa and Item 1.d. of Table 4 to 40 CFR 60, Subpart RRRa]

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- (5) Selection of a representative measurement location. [Item 1.e. of Table 4 to 40 CFR 60, Subpart NNNa and Item 1.e. of Table 4 to 40 CFR 60, Subpart RRRa]
- f. Except as provided in 40 CFR 60.670a(f) and (g) or 40 CFR 60.710a(f) and (g), the permittee must inspect each closed vent system according to the procedures and schedule specified in 40 CFR 60.670a(a)(1) through (3) or 40 CFR 60.710a(a)(1) through (3). [40 CFR 60.670a(a) and 40 CFR 60.710a(a)]
- (1) Conduct an initial inspection according to the procedures in 40 CFR 60.670a(b) or 40 CFR 60.710a(b) unless the closed vent system is operated and maintained under negative pressure; [40 CFR 60.670a(a)(1) and 40 CFR 60.710a(a)(1)]
 - (2) Conduct annual inspections according to the procedures in 40 CFR 60.670a(b) or 40 CFR 60.710a(b) unless the closed vent system is operated and maintained under negative pressure; and [40 CFR 60.670a(a)(2) and 40 CFR 60.710a(a)(2)]
 - (3) Conduct annual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 60.670a(a)(3) and 40 CFR 60.710a(a)(3)]
- g. The permittee must inspect each closed vent system according to the procedures specified in 40 CFR 60.670a(b)(1) through (6) or 40 CFR 60.710a(b)(1) through (6). [40 CFR 60.670a(b) and 40 CFR 60.710a(b)]
- (1) Inspections must be conducted in accordance with Method 21 of appendix A of 40 CFR part 60. [40 CFR 60.670a(b)(1) and 40 CFR 60.710a(b)(1)]
 - (2) Except as provided in 40 CFR 60.670a(b)(2)(ii) or 40 CFR 60.710a(b)(2)(ii), the detection instrument must meet the performance criteria of Method 21 of appendix A of 40 CFR part 60, except the instrument response factor criteria in section 3.1.2(a) of Method 21 must be for the average composition of the process fluid not each individual volatile organic compound in the stream. For process streams that contain nitrogen, air, or other inerts which are not organic hazardous air pollutants or volatile organic compounds, the average stream response factor must be calculated on an inert-free basis. [40 CFR 60.670a(b)(2)(i) and 40 CFR 60.710a(b)(2)(i)]
 - (3) If no instrument is available at the plant site that will meet the performance criteria specified in 40 CFR 60.670a(b)(2)(i) or 40 CFR 60.710a(b)(2)(i), the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis as described in 40 CFR 60.670a(b)(2)(i) or 40 CFR 60.710a(b)(2)(i). [40 CFR 60.670a(b)(2)(ii) and 40 CFR 60.710a(b)(2)(ii)]
 - (4) The detection instrument must be calibrated before use on each day of its use by the procedures specified in Method 21 of appendix A of 40 CFR part 60. [40 CFR 60.670a(b)(3) and 40 CFR 60.710a(b)(3)]
 - (5) Calibration gases must be as follows: [40 CFR 60.670a(b)(4) and 40 CFR 60.710a(b)(4)]
 - (i) Zero air (less than 10 parts per million hydrocarbon in air); and [40 CFR 60.670a(b)(4)(i) and 40 CFR 60.710a(b)(4)(i)]
 - (ii) Mixtures of methane in air at a concentration less than 2,000 parts per million. A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in 40 CFR 60.670a(b)(2)(i) or 40 CFR 60.710a(b)(2)(i). In such cases,

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- the calibration gas may be a mixture of one or more of the compounds to be measured in air. [40 CFR 60.670a(b)(4)(ii) and 40 CFR 60.710a(b)(4)(ii)]
- (6) The permittee may elect to adjust or not adjust instrument readings for background. If the permittee elects to not adjust readings for background, all such instrument readings must be compared directly to the applicable leak definition to determine whether there is a leak. [40 CFR 60.670a(b)(5) and 40 CFR 60.710a(b)(5)]
- (7) If the permittee elects to adjust instrument readings for background, the permittee must determine the background concentration using Method 21 of appendix A of 40 CFR part 60. After monitoring each potential leak interface, subtract the background reading from the maximum concentration indicated by the instrument. The arithmetic difference between the maximum concentration indicated by the instrument and the background level must be compared with 500 parts per million for determining compliance. [40 CFR 60.670a(b)(6) and 40 CFR 60.710a(b)(6)]
- h. Any parts of the closed vent system that are designated, as described in 40 CFR 60.670a(h)(1) or 40 CFR 60.710a(h)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.670a(a)(1) and (2) or 40 CFR 60.710a(a)(1) and (2) if: [40 CFR 60.670a(f) and 40 CFR 60.710a(f)]
- (1) The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with 40 CFR 60.670a(a)(1) and (2) or 40 CFR 60.710a(a)(1) and (2); and [40 CFR 60.670a(f)(1) and 40 CFR 60.710a(f)(1)]
- (2) The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times. [40 CFR 60.670a(f)(2) and 40 CFR 60.710a(f)(2)]
- i. Any parts of the closed vent system are designated, as described 40 CFR 60.670a(h)(2) or 40 CFR 60.710a(h)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.670a(a)(1) and (2) or 40 CFR 60.710a(a)(1) and (2) if: [40 CFR 60.670a(g) and 40 CFR 60.710a(g)]
- (1) The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and [40 CFR 60.670a(g)(1) and 40 CFR 60.710a(g)(1)]
- (2) The permittee has a written plan that requires inspection of the equipment at least once every 5 years. [40 CFR 60.670a(g)(2) and 40 CFR 60.710a(g)(2)]
- j. For each bypass lines or relief valve that could divert a vent stream from TNT-1 away from the control devices and to the atmosphere, including during Emergency Venting events, the permittee must install, calibrate, maintain, and operate a flow indicator that determines whether vent stream flow is present at least once every 15 minutes. The flow indicator must be installed at the entrance to any bypass line. [401 KAR 52:020, Section 10]
- k. The permittee must install and operate a NO_x concentration (ppmv) continuous emissions monitoring system (CEMS) at the location elected in **4. Specific Monitoring Requirements** 1. The permittee must also install and operate a stack gas flow rate monitoring system. With measurements of stack gas NO_x concentration and stack gas

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flow rate, the permittee will determine hourly NO_x emissions rate (e.g., lb/hr). The permittee must operate the monitoring system and report emissions during all operating periods including unit startup and shutdown, and malfunction. [401 KAR 52:020, Section 10]

- (1) The permittee must install, calibrate, maintain, and operate a CEMS for measuring and recording the concentration of NO_x emissions in accordance with the provisions of 40 CFR 60.13 and Performance Specification 2 of appendix B and Procedure 1 of appendix F of 40 CFR part 60. The permittee must use cylinder gas audits to fulfill the quarterly auditing requirement at section 5.1 of Procedure 1 of appendix F of 40 CFR part 60 for the NO_x concentration CEMS.
- (2) For the NO_x concentration CEMS, use a span value, as defined in Performance Specification 2, section 3.1.1, of appendix B of 40 CFR part 60, of 500 ppmv (as NO₂). If the permittee emits NO_x at concentrations higher than 600 ppmv (e.g., during startup or shutdown periods), the permittee must apply a second CEMS or dual range CEMS and a second span value equal to 125 percent of the maximum estimated NO_x emission concentration to apply to the second CEMS or to the higher of the dual analyzer ranges during such periods.
- (3) For conducting the relative accuracy test audits, per Performance Specification 2, section 8.4, of appendix B of 40 CFR part 60 and Procedure 1, section 5.1.1, of appendix F of 40 CFR part 60, use either EPA Reference Method 7, 7A, 7C, 7D, or 7E of appendix A-4 of 40 CFR part 60; EPA Reference Method 320 of appendix A of 40 CFR part 63; or ASTM D6348-03 (incorporated by reference, see 40 CFR 60.17). To verify the operation of the second CEMS or the higher range of a dual analyzer CEMS described in paragraph (2) above, the permittee need not conduct a relative accuracy test audit but only the calibration drift test initially (found in Performance Specification 2, section 8.3.1, of appendix B of 40 CFR part 60) and the cylinder gas audit thereafter (found in Procedure 1, section 5.1.2, of appendix F of 40 CFR part 60).
- (4) If the permittee uses EPA Reference Method 7E of appendix A-4 of 40 CFR part 60, the permittee must mitigate loss of NO₂ in water according to the requirements in paragraphs (i), (ii), or (iii) below and verifies performance by conducting the system bias checks required in EPA Reference Method 7E, section 8, of appendix A-4 of 40 CFR part 60 according to paragraph (iv) below, or follow the dynamic spike procedure according to paragraph (v) below.
 - (i) For a wet-basis measurement system, the permittee must measure and report temperature of sample line and components (up to analyzer inlet) to demonstrate that the temperatures remain above the sample gas dew point at all times during the sampling.
 - (ii) The permittee may use a dilution probe to reduce the dew point of the sample gas.
 - (iii) The permittee may use a refrigerated-type condenser or similar device (e.g., permeation dryer) to remove condensate continuously from sample gas while maintaining minimal contact between condensate and sample gas.
 - (iv) If the permittee's analyzer measures nitric oxide (NO) and nitrogen dioxide (NO₂) separately, the permittee must use both NO and NO₂ calibration gases. Otherwise, the permittee must substitute NO₂ calibration gas for NO calibration gas in the performance of system bias checks.

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- (v) The permittee must conduct dynamic spiking according to EPA Reference Method 7E, section 16.1, of appendix A-4 of 40 CFR part 60 using NO₂ as the spike gas.
- (5) Instead of a NO_x concentration CEMS meeting Performance Specification 2, the permittee may apply an FTIR CEMS meeting the requirements of Performance Specification 15 of appendix B of 40 CFR part 60 to measure NO_x concentrations. Should the permittee use an FTIR CEMS, the permittee must replace the Relative Accuracy Test Audit requirements of Procedure 1 of appendix F of 40 CFR part 60 with the validation requirements and criteria of Performance Specification 15, sections 11.1.1 and 12.0, of appendix B of 40 CFR part 60.
- l. The permittee shall install and operate the NO_x CEMS required by **4. Specific Monitoring Requirements k.** at one of the following locations: [401 KAR 52:020, Section 10]
 - (1) In the ARU-1 stack (i.e. downstream of the thermal oxidizer at a location representative of all NO_x emissions from the ARU-1 stack); or
 - (2) Between the NO_x absorption column and the thermal oxidizer (i.e. representative of process NO_x emissions from emission unit TNT-1, Process ID 1 and ARU-1, Process ID 1 only).
- m. *Determining NO_x mass emission rate values.* The permittee must use the NO_x concentration CEMS, gas flow rate monitor, and other monitoring data, if applicable, to calculate emissions data in lbs/hr. [401 KAR 52:020, Section 10]
 - (1) The permittee must install, calibrate, maintain, and operate a continuous emissions rate monitoring system (CERMS) for measuring and recording the stack gas flow rates at the location elected in **4. Specific Monitoring Requirements l.** to use in combination with data from the CEMS for measuring emissions concentrations of NO_x to produce data in units of mass rate (e.g., lb/hr) of NO_x on an hourly basis. The permittee will operate and certify the CERMS in accordance with the provisions of 40 CFR 60.13 and Performance Specification 6 of appendix B of 40 CFR part 60. The permittee must comply with the following provisions (i) through (iii) below:
 - (i) The permittee must use a stack gas flow rate sensor with a full scale output of at least 125 percent of the maximum expected exhaust volumetric flow rate (see Performance Specification 6, section 8, of appendix B of 40 CFR part 60).
 - (ii) For conducting the relative accuracy test audits, per Performance Specification 6, section 8.2 of appendix B of 40 CFR part 60 and Procedure 1, section 5.1.1, of appendix F of 40 CFR part 60, the permittee must use either EPA Reference Method 2, 2F, or 2G of appendix A-4 of 40 CFR part 60. The permittee may also apply Method 2H in conjunction with other velocity measurements.
 - (iii) The permittee must verify that the CERMS complies with the quality assurance requirements in Procedure 1 of appendix F of 40 CFR part 60. The permittee must conduct relative accuracy testing to provide for calculating the relative accuracy for RATA and RAA determinations in units of lb/hour.
 - (2) The permittee must calculate hourly NO_x emissions rates in units of lb/hour for each hour when flow is present at the measurement location.

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- (3) If the permittee elects to install and operate the NO_x CEMS and CERMS at the location described in **4. Specific Monitoring Requirements l(2)**, the permittee must also account for emissions from emission unit TNT-1, Process ID 2 and emission unit ARU-1, Process ID 2 as follows:
- (i) The permittee shall monitor the amount of TNT produced in tons on a monthly basis in order to determine NO_x emissions from the combustion of tetranitromethane (TNM) accounted for under emission unit TNT-1, Process ID 2 as follows:
 - (A) Prior to approval of the performance test required by **3. Testing Requirements e.**, the permittee shall multiply the amount of TNT produced in tons by an emission factor of 9.39 lb NO_x/ton TNT produced to determine monthly NO_x emissions.
 - (B) If the performance test based emission factor calculated pursuant to **3. Testing Requirements e.** exceeds 9.39 lb NO_x/ton TNT produced, the permittee shall use the performance test based emission factor for emission calculations following Division approval of the performance test results. If the performance test based emission factor is less than 9.39 lb NO_x/ton TNT produced, the permittee shall continue to use an emission factor of 9.39 lb NO_x/ton TNT produced for emission calculations.
 - (C) The permittee may submit a permit revision application with test results, engineering analysis, and other supporting information demonstrating that the performance test based emission factor calculated pursuant to **3. Testing Requirements e.** or an adjusted emission factor is more representative of the source's operation.
 - (ii) The permittee shall determine NO_x emissions from combustion of natural gas in the thermal oxidizer accounted for under emission unit TNT-1, Process ID 2 by monitoring the amount of natural gas combusted, in MMscf, and multiplying by an emission factor of 100 lb NO_x/MMscf natural gas combusted.
 - (iii) See **5. Specific Recordkeeping Requirements j.** and **6. Specific Reporting Requirements j.**
- n. For the continuous monitoring systems required by **4. Specific Monitoring Requirements k.** and **m.**, the permittee must meet the requirements of (1) and (2) below. [401 KAR 52:020, Section 10]
- (1) The permittee must operate the monitoring system and collect data at all required intervals at all times TNT-1, ARU-1, or RMH-5 are operating except for periods of monitoring system malfunctions or out-of-control periods as defined in appendix F, sections 4 and 5, of 40 CFR part 60, repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments.
 - (2) The permittee may not use data recorded during monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in calculations used to report emissions. The permittee must use all the data

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

collected during all other periods in calculating emissions in accordance with 4.
Specific Monitoring Requirements m(2).

5. Specific Recordkeeping Requirements:

- a. The permittee must keep an up-to-date, readily accessible record of the data measured during each performance test to show compliance with the TOC emission limit specified in table 1 to 40 CFR 60, Subpart NNNa or table 1 to 40 CFR 60, Subpart RRRa. The permittee must also include all of the data the permittee uses to comply with 40 CFR 60.663a(a)(2) or 60.703a(a)(2). [40 CFR 60.665a(b) and 40 CFR 60.703a(b)]
- b. The permittee must keep up-to-date, readily accessible records of periods of operation during which the operating parameter limits established during the most recent performance test are exceeded. The Administrator may at any time require a report of these data. Periods of operation during which the operating parameter limits established during the most recent performance tests are exceeded are defined as follows: [40 CFR 60.665a(c) and 40 CFR 60.705a(c)]
 - (1) For thermal incinerators, all 3-hour periods of operation during which the average firebox temperature was below the minimum firebox temperature established during the most recent performance test. [40 CFR 60.665a(c)(7) and 40 CFR 60.705a(c)(7)]
- c. The permittee must keep up to date, readily accessible continuous records of the flow indication specified in table 2 to 40 CFR 60, Subpart NNNa or table 2 to 40 CFR 60, Subpart RRRa, as well as up-to-date, readily accessible records of all periods when the vent stream is diverted from the control device or recovery device or has no flow rate, including the records as specified in paragraphs 40 CFR 60.665a(d)(1) and (2) or 40 CFR 60.705a(d)(1) and (2). [40 CFR 60.665a(d) or 40 CFR 60.705a(d)]
 - (1) For each flow event from a relief valve discharge subject to the requirements in 40 CFR 60.662a(b)(1) or 40 CFR 60.702a(b)(1), the permittee must include an estimate of the volume of gas, the concentration of TOC in the gas and the resulting emissions of TOC that released to the atmosphere using process knowledge and engineering estimates. [40 CFR 60.665a(d)(1) and 40 CFR 60.705a(d)(1)]
 - (2) For each flow event from a bypass line subject to the requirements in 40 CFR 60.662a(b)(2) and 40 CFR 60.670a(e) or 40 CFR 60.702a(b)(2) and 40 CFR 60.710a(e), the permittee must maintain records sufficient to determine whether or not the detected flow included flow requiring control. For each flow event from a bypass line requiring control that is released either directly to the atmosphere or to a control device or recovery device not meeting the requirements in 40 CFR 60, Subpart NNNa or RRRa, the permittee must include an estimate of the volume of gas, the concentration of TOC in the gas and the resulting emissions of TOC that bypassed the control device or recovery device using process knowledge and engineering estimates. [40 CFR 60.665a(d)(2) and 40 CFR 60.705a(d)(2)]
- d. For each maintenance vent opening subject to the requirements of 40 CFR 60.662a(c) or 40 CFR 60.702a(c), the permittee must keep the applicable records specified in 40 CFR 60.665a(g)(1) through (5) or 40 CFR 60.705a(g)(1) through (5). [40 CFR 60.665a(g) and 40 CFR 60.705a(g)]

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

- (1) The permittee must maintain standard site procedures used to inventory equipment for safety purposes (e.g., hot work or vessel entry procedures) to document the procedures used to meet the requirements in 40 CFR 60.662a(c) or 40 CFR 60.702a(c). The current copy of the procedures must be retained and available on-site at all times. Previous versions of the standard site procedures, as applicable, must be retained for five years. [40 CFR 60.665a(g)(1) and 40 CFR 60.665a(g)(1)]
- (2) If complying with the requirements of 40 CFR 60.662a(c)(1)(i) or 40 CFR 60.702a(c)(1)(i), and the lower explosive limit at the time of the vessel opening exceeds 10 percent, identification of the maintenance vent, the process units or equipment associated with the maintenance vent, the date of maintenance vent opening, and the lower explosive limit at the time of the vessel opening. [40 CFR 60.665a(g)(2) and 40 CFR 60.705a(g)(2)]
- (3) If complying with the requirements of 40 CFR 60.662a(c)(1)(ii) or 40 CFR 60.702a(c)(1)(ii), and either the vessel pressure at the time of the vessel opening exceeds 5 psig or the lower explosive limit at the time of the active purging was initiated exceeds 10 percent, identification of the maintenance vent, the process units or equipment associated with the maintenance vent, the date of maintenance vent opening, the pressure of the vessel or equipment at the time of discharge to the atmosphere and, if applicable, the lower explosive limit of the vapors in the equipment when active purging was initiated. [40 CFR 60.665a(g)(3) and 40 CFR 60.705a(g)(3)]
- (4) If complying with the requirements of 40 CFR 60.662a(c)(1)(iii) or 40 CFR 60.702a(c)(1)(iii), records of the estimating procedures used to determine the total quantity of VOC in the equipment and the type and size limits of equipment that contain less than 50 pounds of VOC at the time of maintenance vent opening. For each maintenance vent opening that contains greater than 50 pounds of VOC for which the inventory procedures specified in 40 CFR 60.665a(g)(1) or 40 CFR 60.705a(g)(1) are not followed or for which the equipment opened exceeds the type and size limits established in the records specified in 40 CFR 60.665a(g)(4) or 40 CFR 60.705a(g)(4), records that identify the maintenance vent, the process units or equipment associated with the maintenance vent, the date of maintenance vent opening, and records used to estimate the total quantity of VOC in the equipment at the time the maintenance vent was opened to the atmosphere. [40 CFR 60.665a(g)(4) and 40 CFR 60.705a(g)(4)]
- (5) If complying with the requirements of 40 CFR 60.662a(c)(1)(iv) or 40 CFR 60.702a(c)(1)(iv), identification of the maintenance vent, the process units or equipment associated with the maintenance vent, records documenting actions taken to comply with other applicable alternatives and why utilization of this alternative was required, the date of maintenance vent opening, the equipment pressure and lower explosive limit of the vapors in the equipment at the time of discharge, an indication of whether active purging was performed and the pressure of the equipment during the installation or removal of the blind if active purging was used, the duration the maintenance vent was open during the blind installation or removal process, and records used to estimate the total quantity of VOC in the equipment at the time the maintenance vent was opened to the atmosphere for each applicable maintenance vent opening. [40 CFR 60.665a(g)(5) and 40 CFR 60.705a(g)(5)]

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- e. The permittee must record the information specified in 40 CFR 60.670a(h)(1) through (5) or 40 CFR 60.710a(h)(1) through (5). [40 CFR 60.670a(h) and 40 CFR 60.710a(h)]
- (1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment. [40 CFR 60.670a(h)(1) and 40 CFR 60.710a(h)(1)]
 - (2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment. [40 CFR 60.670a(h)(2) and 40 CFR 60.710a(h)(2)]
 - (3) For each closed vent system that contains bypass lines that could divert a vent stream away from the control device and to the atmosphere, the permittee must keep a record of the information specified in either 40 CFR 60.670a(h)(3)(i) or (ii) or 40 CFR 60.710a(h)(3)(i) or (ii) in addition to the information specified in 40 CFR 60.670a(h)(3)(iii) or 40 CFR 60.710a(h)(3)(iii). [40 CFR 60.670a(h)(3) and 40 CFR 60.710a(h)(3)]
 - (i) Hourly records of whether the flow indicator specified under 40 CFR 60.670a(e)(1) or 40 CFR 60.710a(e)(1) was operating and whether a diversion was detected at any time during the hour, as well as records of the times of all periods when the vent stream is diverted from the control device or the flow indicator is not operating. [40 CFR 60.670a(h)(3)(i) and 40 CFR 60.710a(h)(3)(i)]
 - (ii) Where a seal mechanism is used to comply with 40 CFR 60.670a(e)(2) or 40 CFR 60.710a(e)(2), hourly records of flow are not required. In such cases, the permittee must record whether the monthly visual inspection of the seals or closure mechanisms has been done, and the permittee must record the occurrence of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type configuration has been checked out, and records of any car-seal that has broken. [40 CFR 60.670a(h)(3)(ii) and 40 CFR 60.710a(h)(3)(ii)]
 - (iii) For each flow event from a bypass line subject to the requirements in 40 CFR 60.670a(e) or 40 CFR 60.710a(e), the permittee must maintain records sufficient to determine whether or not the detected flow included flow requiring control. For each flow event from a bypass line requiring control that is released either directly to the atmosphere or to a control device not meeting the requirements in 40 CFR 60, Subpart NNa or 40 CFR 60, Subpart RRRa, the permittee must include an estimate of the volume of gas, the concentration of VOC in the gas and the resulting emissions of VOC that bypassed the control device using process knowledge and engineering estimates. [40 CFR 60.670a(h)(3)(iii) and 40 CFR 60.710a(h)(3)(iii)]
 - (4) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.670a(h)(4)(i) through (viii) or 40 CFR 60.710a(h)(4)(i) through (viii). [40 CFR 60.670a(h)(4) and 40 CFR 60.710a(h)(4)]
 - (i) The instrument identification numbers; operator name or initials; and identification of the equipment. [40 CFR 60.670a(h)(4)(i) and 40 CFR 60.710a(h)(4)(i)]
 - (ii) The date the leak was detected and the date of the first attempt to repair the leak. [40 CFR 60.670a(h)(4)(ii) and 40 CFR 60.710a(h)(4)(ii)]

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- (iii) Maximum instrument reading measured by the method specified in 40 CFR 60.670a(c) or 40 CFR 60.710a(c) after the leak is successfully repaired or determined to be nonreparable. [40 CFR 60.670a(h)(4)(iii) and 40 CFR 60.710a(h)(4)(ii)]
- (iv) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. [40 CFR 60.670a(h)(4)(iv) and 40 CFR 60.710a(h)(4)(iv)]
- (v) The name, initials, or other form of identification of the permittee (or designee) whose decision it was that repair could not be effected without a shutdown. [40 CFR 60.670a(h)(4)(v) and 40 CFR 60.710a(h)(4)(v)]
- (vi) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days. [40 CFR 60.670a(h)(4)(vi) and 40 CFR 60.710a(h)(4)(vi)]
- (vii) Dates of shutdowns that occur while the equipment is unrepaired. [40 CFR 60.670a(h)(4)(vii) and 40 CFR 60.710a(h)(4)(vii)]
- (viii) The date of successful repair of the leak. [40 CFR 60.670a(h)(4)(viii) and 40 CFR 60.710a(h)(4)(vii)]
- (5) For each inspection conducted in accordance with 40 CFR 60.670a(b) or 40 CFR 60.710a(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.670a(h)(5) and 40 CFR 60.710a(h)(5)]
- (6) For each inspection conducted in accordance with 40 CFR 60.670a(a)(3) or 40 CFR 60.710a(a)(3) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.670a(h)(6) and 40 CFR 60.710a(h)(6)]
- f. Any records required to be maintained by 40 CFR 60, Subpart NNNa or 40 CFR 60, Subpart RRRa that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for the permittee to make records, data, and reports available upon request to the Division or the EPA as part of an on-site compliance evaluation. [40 CFR 60.665a(r) and 40 CFR 60.705a(v)]
- g. The permittee shall maintain records of production in tons on a monthly basis for calculation of emissions in accordance with **Section D. 3.** [401 KAR 52:020, Section 10]
- h. The permittee shall maintain hourly records of whether the flow indicator required by **4. Specific Monitoring Requirements** j. was operating and whether a diversion was detected at any time during the hour, as well as records of the times and durations of all periods when the vent stream is diverted to the atmosphere or the flow indicator is not operating. For each flow event, the permittee shall record an estimate of the volume of gas, the concentration of CO and NO_x in the gas and the resulting emissions of CO and NO_x that released to the atmosphere using process knowledge and engineering estimates. These estimates shall be included in the calculation of source-wide emissions in accordance with **Section D. 3.** [401 KAR 52:020, Section 10]

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- i. For the NO_x emissions rate, the permittee must keep records for and results of the performance evaluations of the continuous emissions monitoring systems. [401 KAR 52:020, Section 10]
 - (1) The permittee must maintain records of any modifications to CEMS which could affect the ability of the CEMS to comply with applicable performance specifications.
 - (2) The permittee must maintain records of time periods when the pollutant concentration exceeded full span of the NO_x monitoring equipment and time periods when the volumetric flow rate exceeded the high value of the volumetric flow rate monitoring equipment.
- j. The permittee must keep records of hourly and monthly emissions of NO_x calculated according to **4. Specific Monitoring Requirements** m. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

- a. The permittee must notify the Administrator of the specific provisions of table 1 of 40 CFR 60, Subpart NNNa or 40 CFR 60.662a(c) and table 1 of 40 CFR 60, Subpart RRRa or 40 CFR 60.702a(c) with which the permittee has elected to comply. Notification must be submitted with the notification of initial start-up required by 40 CFR 60.7(a)(3). If the permittee elects at a later date to use an alternative provision of table 1 to 40 CFR 60, Subpart NNNa or table 1 to 40 CFR 60, Subpart RRRa with which they will comply, then the permittee must notify the Administrator 90 days before implementing a change and, upon implementing the change, the permittee must conduct a performance test as specified by 40 CFR 60.664a or 40 CFR 60.704a within 180 days. [40 CFR 60.665a(a)]
- b. The data specified in **5. Specific Recordkeeping Requirements** a. must also be submitted in the initial performance test report required in 40 CFR 60.8 and the reports of all subsequently required performance tests where either the emission reduction efficiency of a control device or recovery system or outlet concentration of TOC is determined. [40 CFR 60.665a(b) and 40 CFR 60.705a(b)]
 - (1) Within 60 days after the date of completing each performance test required by 40 CFR 60, Subpart NNNa or 40 CFR 60, Subpart RRRa, the permittee must submit the results of the performance test following the procedures specified in 40 CFR 60.665a(k) or 40 CFR 60.705a(l). [40 CFR 60.665a(b)(1) and 40 CFR 60.705a(b)(1)]
- c. The permittee must submit to the Administrator semiannual reports of the information specified in 40 CFR 60.665a(j)(1) through (9) and 40 CFR 60.705a(k)(1) through (10). The permittee is exempt from the reporting requirements specified in 40 CFR 60.7(c). If there are no exceedances, periods, or events specified in 40 CFR 60.665a(j)(1) through (9) or 40 CFR 60.705a(k)(1) through (10) that occurred during the reporting period, then the permittee must include a statement in the report that no exceedances, periods, and events specified in 40 CFR 60.665a(j)(1) through (9) or 40 CFR 60.705a(k)(1) through (10) occurred during the reporting period. The initial report must be submitted within 6 months after the initial start-up-date. The permittee must submit all subsequent reports using the appropriate electronic report template on the CEDRI website for 40 CFR 60, Subpart NNNa or 40 CFR 60, Subpart RRRa and following the procedure specified in 40 CFR 60.665a(k) or 40 CFR 60.705a(l). Unless the Administrator or delegated state agency or other authority has approved a different schedule for submission of reports, the

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report must be submitted by the deadline specified in 40 CFR 60, Subpart NNNa or 40 CFR 60, Subpart RRRa, regardless of the method in which the report is submitted. All semiannual reports must include the following general information: company name, address (including county), and beginning and ending dates of the reporting period. [40 CFR 60.665a(j) and 40 CFR 60.705a(k)]

- (1) Exceedances of monitored parameters recorded under 40 CFR 60.665a(c) or 40 CFR 60.705a(c). For each exceedance, the report must include a list of the affected facilities or equipment, the monitored parameter that was exceeded, the start date and time of the exceedance, the duration (in hours) of the exceedance, an estimate of the quantity in pounds of each regulated pollutant emitted over any emission limit, a description of the method used to estimate the emissions, the cause of the exceedance (including unknown cause, if applicable), as applicable, and the corrective action taken. [40 CFR 60.665a(j)(1) and 40 CFR 60.705a(k)(1)]
 - (2) All periods recorded under 40 CFR 60.665a(d) or 40 CFR 60.705a(d) when the vent stream is diverted from the control device or recovery device, or has no flow rate, including the information specified in 40 CFR 60.665a(j)(2)(i) through (iii) or 40 CFR 60.705a(k)(2)(i) through (iii). [40 CFR 60.665a(j)(2) and 40 CFR 60.705a(k)(2)]
 - (i) For periods when the flow indicator is not operating, report the identification of the flow indicator and the start date, start time, and duration in hours. [40 CFR 60.665a(j)(2)(i) and 40 CFR 60.705a(k)(2)(i)]
 - (ii) For each flow event from a relief valve discharge subject to the requirements in 40 CFR 60.662a(b)(1) or 40 CFR 60.702a(b)(1), the semiannual report must include the identification of the relief valve, the start date, start time, duration in hours, estimate of the volume of gas in standard cubic feet, the concentration of TOC in the gas in parts per million by volume and the resulting mass emissions of TOC in pounds that released to the atmosphere. [40 CFR 60.665a(j)(2)(ii) and 40 CFR 60.705a(k)(2)(ii)]
 - (iii) For each flow event from a bypass line subject to the requirements in 40 CFR 60.662a(b)(2) and 40 CFR 60.670a(e)(2) or 40 CFR 60.702a(b)(2) and 40 CFR 60.710a(e)(2), the semiannual report must include the identification of the bypass line, the start date, start time, duration in hours, estimate of the volume of gas in standard cubic feet, the concentration of TOC in the gas in parts per million by volume and the resulting mass emissions of TOC in pounds that bypass a control device or recovery device. [40 CFR 60.665a(j)(2)(iii) and 40 CFR 60.705a(k)(2)(iii)]
 - (3) For each closed vent system subject to the requirements in 40 CFR 60.670a or 40 CFR 60.710a, the semiannual report must include an identification of the closed vent system and the items specified in 40 CFR 60.670a(i) or 40 CFR 60.710a(i). [40 CFR 60.665a(j)(5) and 40 CFR 60.705a(k)(5)]
- d. The semiannual report specified in 40 CFR 60.665a(j)(5) or 40 CFR 60.705a(k)(5) must include the items specified in 40 CFR 60.670a(i)(1) through (3) or 40 CFR 60.710a(i)(1) through (3). [40 CFR 60.670a(i) and 40 CFR 60.710a(i)]
- (1) Reports of the times of all periods recorded under 40 CFR 60.670a(h)(3)(i) or 40 CFR 60.710a(h)(3)(i) when the vent stream is diverted from the control device through a

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

- bypass line. Include the start date, start time, and duration in hours of each period. [40 CFR 60.670a(i)(1) and 40 CFR 60.710a(i)(1)]
- (2) Reports of all periods recorded under 40 CFR 60.670a(h)(3)(ii) or 40 CFR 60.710a(h)(3)(ii) in which the seal mechanism is broken, the bypass line valve position has changed, or the key to unlock the bypass line valve was checked out. Include the start date, start time, and duration in hours of each period. 40 CFR 60.670a(i)(2) and 40 CFR 60.710a(i)(2)]
- (3) For bypass lines subject to the requirements in 40 CFR 60.670a(e) or 40 CFR 60.710a(e), the semiannual reports must include the start date, start time, duration in hours, estimate of the volume of gas in standard cubic feet, the concentration of VOC in the gas in parts per million by volume and the resulting mass emissions of VOC in pounds that bypass a control device. For periods when the flow indicator is not operating, report the start date, start time, and duration in hours. [40 CFR 60.670a(i)(3) and 40 CFR 60.710a(i)(3)]
- e. If the permittee is required to submit notifications or reports following the procedure specified in 40 CFR 60.665a(k) or 40 CFR 60.705a(l), the permittee must submit notifications or reports to the EPA via CEDRI, which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The EPA will make all the information submitted through CEDRI available to the public without further notice to the permittee. Do not use CEDRI to submit information the permittee claims as CBI. Although the EPA does not expect persons to assert a claim of CBI, if the permittee wishes to assert a CBI claim for some of the information in the report or notification, the permittee must submit a complete file in the format specified in 40 CFR 60, Subpart NNNa or 40 CFR 60, Subpart RRRa, including information claimed to be CBI, to the EPA following the procedures in 40 CFR 60.665a(k)(1) and (2) or 40 CFR 60.705a(l)(1) and (2). Clearly mark the part or all of the information that the permittee claims to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. The permittee must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described earlier in this paragraph. [40 CFR 60.665a(k) and 40 CFR 60.705a(l)]
- (1) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address oaqpscbi@epa.gov, and as described above, should include clear CBI markings. ERT files should be flagged to the attention of the Group Leader, Measurement Policy Group; all other files should be flagged to the attention of the SOCMI NSPS Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if the permittee does not

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- have their own file sharing service, please email oaqpscbi@epa.gov to request a file transfer link. [40 CFR 60.665a(k)(1) and 40 CFR 60.705a(l)(1)]
- (2) If the permittee cannot transmit the file electronically, the permittee may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, 109 T.W. Alexander Drive, P.O. Box 12055, Research Triangle Park, North Carolina 27711. ERT files should be sent to the attention of the Group Leader, Measurement Policy Group, and all other files should be sent to the attention of the SOCMI NSPS Sector Lead. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope. [40 CFR 60.665a(k)(2) and 40 CFR 60.705a(l)(2)]
- f. If the permittee is required to electronically submit notifications or reports through CEDRI in the EPA's CDX, the permittee may assert a claim of EPA system outage for failure to timely comply with the electronic submittal requirement. To assert a claim of EPA system outage, the permittee must meet the requirements outlined in 40 CFR 60.665a(l)(1) through (7) or 40 CFR 60.705a(m)(1) through (7). [40 CFR 60.665a(l)]
- (1) The permittee must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems. [40 CFR 60.665a(l)(1) and 40 CFR 60.705a(m)(1)]
- (2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due. [40 CFR 60.665a(l)(2) and 40 CFR 60.705a(m)(2)]
- (3) The outage may be planned or unplanned. [40 CFR 60.665a(l)(3) and 40 CFR 60.705a(m)(3)]
- (4) The permittee must submit notification to the Administrator in writing as soon as possible following the date the permittee first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting. [40 CFR 60.665a(l)(4) and 40 CFR 60.705a(m)(4)]
- (5) The permittee must provide to the Administrator a written description identifying: [40 CFR 60.665a(l)(5) and 40 CFR 60.705a(m)(5)]
- (i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable; [40 CFR 60.665a(l)(5)(i) and 40 CFR 60.705a(m)(5)(i)]
- (ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage; [40 CFR 60.665a(l)(5)(ii) and 40 CFR 60.705a(m)(5)(ii)]
- (iii) A description of measures taken or to be taken to minimize the delay in reporting; and [40 CFR 60.665a(l)(5)(iii) and 40 CFR 60.705a(m)(5)(iii)]
- (iv) The date by which the permittee proposes to report, or if the permittee has already met the reporting requirement at the time of the notification, the date the permittee reported. [40 CFR 60.665a(l)(5)(iv) and 40 CFR 60.705a(m)(5)(iv)]
- (6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator. [40 CFR 60.665a(l)(6) and 40 CFR 60.705a(m)(6)]
- (7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. [40 CFR 60.665a(l)(7) and 40 CFR 60.705a(m)(7)]

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

- g. If the permittee is required to electronically submit notifications or reports through CEDRI in the EPA's CDX, the permittee may assert a claim of force majeure for failure to timely comply with the electronic submittal requirement. To assert a claim of force majeure, the permittee must meet the requirements outlined in 40 CFR 60.665a(m)(1) through (5) or 40 CFR 60.705a(n)(1) through (5). [40 CFR 60.665a(m) and 40 CFR 60.705a(n)]
- (1) The permittee may submit a claim if a *force majeure* event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of 40 CFR 60.665a, a *force majeure* event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the permittee from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.*, hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.*, large scale power outage). [40 CFR 60.665a(m)(1) and 40 CFR 60.705a(n)(1)]
 - (2) The permittee must submit notification to the Administrator in writing as soon as possible following the date the permittee first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting. [40 CFR 60.665a(m)(2) and 40 CFR 60.705a(n)(2)]
 - (3) The permittee must provide to the Administrator: [40 CFR 60.665a(m)(3) and 40 CFR 60.705a(n)(3)]
 - (i) A written description of the *force majeure* event; [40 CFR 60.665a(m)(3)(i) and 40 CFR 60.705a(n)(3)(i)]
 - (ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the *force majeure* event; [40 CFR 60.665a(m)(3)(ii) and 40 CFR 60.705a(n)(3)(ii)]
 - (iii) A description of measures taken or to be taken to minimize the delay in reporting; and [40 CFR 60.665a(m)(3)(iii) and 40 CFR 60.705a(n)(3)(iii)]
 - (iv) The date by which the permittee proposes to report, or if the permittee has already met the reporting requirement at the time of the notification, the date the permittee reported. [40 CFR 60.665a(m)(3)(iv) and 40 CFR 60.705a(n)(3)(iv)]
 - (4) The decision to accept the claim of *force majeure* and allow an extension to the reporting deadline is solely within the discretion of the Administrator. [40 CFR 60.665a(m)(4) and 40 CFR 60.705a(n)(4)]
 - (5) In any circumstance, the reporting must occur as soon as possible after the *force majeure* event occurs. [40 CFR 60.665a(m)(5) and 40 CFR 60.705a(n)(5)]
- h. For each flow event from a relief valve discharge or bypass line from TNT-1 (“Emergency Venting” event), the semiannual report required by **Section F. 5.** and **6.** must include the identification of the relief valve, the start date, start time, duration in hours, estimate of the volume of gas in standard cubic feet, the concentration of CO and NO_x in the gas in parts per million by volume and the resulting mass emissions of CO and NO_x in pounds that released to the atmosphere. [401 KAR 52:020, Section 10]

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

- i. The permittee must report any modifications to CERMS which could affect the ability of the CERMS to comply with applicable performance specifications. [401 KAR 52:020, Section 10]
- j. Within 30 days of startup of TNT-1, ARU-1, or RMH-5, whichever occurs first, and prior to submission of the performance test protocol, the permittee shall report their election for the location of the NO_x CEMS as described in **4. Specific Monitoring Requirements** 1. [401 KAR 52:020, Section 10]

7. Specific Control Equipment Operating Conditions:

To preclude 401 KAR 51:017 (for CO), the permittee must properly operate the closed vent system and Thermal Oxidizer to control emissions from TNT-1 at all times TNT-1 is in operation. [401 KAR 52:020, Section 10]

Compliance Demonstration Method:

The permittee must operate the thermal oxidizer in accordance with the minimum firebox temperature established during the performance test required by **3. Testing Requirements** d(1).

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

ARU-2 – Solvent Extraction Unit

Description:

The Acid Recovery Unit (ARU) area also includes an extraction system that extracts organics from wastewater. The Extraction Unit uses fresh toluene to strip organics in the organic contaminated condensate from the ARU Organic Stripper and then this is sent to TNT Nitration. Some exhaust is vented to atmosphere. Emissions from the Solvent Extraction Unit consist of short, infrequent emissions of toluene when pressure is relieved.

Construction Date: December 2026 (Proposed)

APPLICABLE REGULATIONS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*. [State-Origin Requirement]

1. Operating Limitations:

None

2. Emission Limitations:

The permittee shall provide the utmost care and consideration, in the handling of materials from which hazardous matter or toxic substances may be emitted, to the potentially harmful effects of the emissions resulting from such activities. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. 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.

3. Testing Requirements:

Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

The permittee shall install, calibrate, and operate according to manufacturer instructions a monitor capable of detecting flow directed to the atmosphere from the pressure relief valve for ARU-2. The permittee shall monitor and record any other parameters relevant to the flow events to support emission estimates required by **5. Specific Recordkeeping Requirements** a. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep up-to-date, readily accessible continuous records of the flow indication specified in **4. Specific Monitoring Requirements** a., including the records as specified in (1) below: [401 KAR 52:020, Section 10]

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

- (1) For each flow event from the pressure relief valve for ARU-2, the permittee shall include an estimate of the volume of gas, concentration of regulated pollutants (including but not limited to: toluene, VOC), and the resulting emissions of regulated pollutants that released to the atmosphere using process knowledge and engineering estimates informed by parameters monitored in accordance with **4. Specific Monitoring Requirements**. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

- a. The semiannual report required by **Section F. 5.** shall include the following information: [401 KAR 52:020, Section 10]
 - (1) For periods when the flow indicator is not operating, report the start date, start time, and duration in hours.
 - (2) For each flow event, the semiannual report shall include the start date, start time, duration in minutes, estimate of the volume of gas in standard cubic feet, the concentration of regulated pollutants in the gas in parts per million by volume (including but not limited to: toluene, DNT, and VOC), and the resulting mass emissions of each regulated pollutant in pounds that released to the atmosphere.
 - (3) Total emissions of toluene and VOC from ARU-2 on a monthly basis in tons.

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

TDU-1 – Thermal Destruction Unit (TDU)

Description:

The Thermal Destruction Unit (TDU) system is a technology designed to destroy the Red Water hazardous waste stream that contains a variety of sulfur and nitrogen bound salts formed in the production of TNT. The Red Water waste stream is injected via air atomized nozzles after the flame. Combustion chamber exhaust gas is routed to a dry sorbent injection (DSI) system to treat SO₂ and SO₃ by injection of sodium bicarbonate. The SO_x scrubbed flue gas then passes through the baghouse/HEPA filter for removal of solids. NO_x is controlled by Selective Catalytic Reduction (SCR) via ammonia injection. Prior to ammonia injection, the gas is directly heated in the natural-gas fired SCR burner chamber.

Manufacturer:	Honeywell UOP Callidus
Model:	UOP Honeywell nViro
Construction Date:	December 2026 (Proposed)
Maximum Waste Throughput:	1.4 tons/hr
Primary Burner Fuel:	Natural Gas
Primary Burner Rating:	11 MMBtu/hr
SCR Burner Fuel:	Natural Gas
SCR Burner Rating	0.7 MMBtu/hr
Controls:	Dry Sorbent Injection (DSI)
	Baghouse (BAG)
	HEPA Filter (HEP)
	Selective Catalytic Reduction (SCR)

APPLICABLE REGULATIONS

401 KAR 59:020, *New incinerators*.

401 KAR 63:002, Section 2(4)(rr), 40 C.F.R. 63.1200 through 63.1221, Table 1, and Appendix A (Subpart EEE), *National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors*.

1. Operating Limitations:

- a. *Applicability.* The emission standards and operating requirements set forth in 40 CFR 63, Subpart EEE apply at all times except: [40 CFR 63.1206(b)(1)]
 - (1) During periods of startup, shutdown, and malfunction, only the requirements specified in 40 CFR 63.1206(c)(2), (c)(10), and (c)(11) apply; [40 CFR 63.1206(b)(1)(i)]
 - (2) When hazardous waste is not in the combustion chamber (i.e., the hazardous waste feed to the combustor has been cut off for a period of time not less than the hazardous waste residence time) and the permittee has documented in the operating record that the permittee is complying with all otherwise applicable requirements and standards promulgated under authority of Clean Air Act section 112 (e.g., 40 CFR part 63, Subparts LLL, DDDDD, and NNNNN) or Clean Air Act section 129 in lieu of the emission standards under 40 CFR 63.1203 through 63.1205, and 63.1215 through 63.1221; the monitoring and compliance standards of 40 CFR 63.1206 and 40 CFR

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

63.1207 through 63.1209, except the modes of operation requirements of 40 CFR 63.1209(q); and the notification, reporting, and recordkeeping requirements of 40 CFR 63.1210 through 63.1212. [40 CFR 63.1206(b)(1)(ii)]

b. *Changes in design, operation, or maintenance* – [40 CFR 63.1206(b)(5)]

- (1) *Changes that may adversely affect compliance.* If the permittee plans to change (as defined in 40 CFR 63.1206(b)(5)(iii)) the design, operation, or maintenance practices of the source in a manner that may adversely affect compliance with any emission standard that is not monitored with a CEMS: [40 CFR 63.1206(b)(5)(i)]
 - (i) *Notification.* The permittee must notify the Administrator at least 60 days prior to the change, unless the permittee documents circumstances that dictate that such prior notice is not reasonably feasible. The notification must include: [40 CFR 63.1206(b)(5)(i)(A)]
 - (A) A description of the changes and which emission standards may be affected; and [40 CFR 63.1206(b)(5)(i)(A)(1)]
 - (B) A comprehensive performance test schedule and test plan under the requirements of 40 CFR 63.1207(f) that will document compliance with the affected emission standard(s); [40 CFR 63.1206(b)(5)(i)(A)(2)]
 - (ii) *Performance test.* The permittee must conduct a comprehensive performance test under the requirements of 40 CFR 63.1207(f)(1) and (g)(1) to document compliance with the affected emission standard(s) and establish operating parameter limits as required under 40 CFR 63.1209, and submit to the Administrator a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(d); and [40 CFR 63.1206(b)(5)(i)(B)]
 - (iii) *Restriction on waste burning.* [40 CFR 63.1206(b)(5)(i)(C)]
 - (A) Except as provided by 40 CFR 63.1206(b)(5)(i)(C)(2), after the change and prior to submitting the notification of compliance, the permittee must not burn hazardous waste for more than a total of 720 hours (renewable at the discretion of the Administrator) and only for the purposes of pretesting or comprehensive performance testing. Pretesting is defined at 40 CFR 63.1207(h)(2)(i) and (ii). [40 CFR 63.1206(b)(5)(i)(C)(1)]
 - (B) The permittee may petition the Administrator to obtain written approval to burn hazardous waste in the interim prior to submitting a Notification of Compliance for purposes other than testing or pretesting. The permittee must specify operating requirements, including limits on operating parameters, that the permittee determines will ensure compliance with the emission standards of 40 CFR 63, Subpart EEE based on available information. The Administrator will review, modify as necessary, and approve if warranted the interim operating requirements. [40 CFR 63.1206(b)(5)(i)(C)(2)]
- (2) *Changes that will not affect compliance.* If the permittee determines that a change will not adversely affect compliance with the emission standards or operating requirements, the permittee must document the change in the operating record upon making such change. The permittee must revise as necessary the performance test plan, Documentation of Compliance, Notification of Compliance, and start-up, shutdown, and malfunction plan to reflect these changes. [40 CFR 63.1206(b)(5)(ii)]

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

- (3) *Definition of “change.”* For the purposes of 40 CFR 63.1206(b)(5), “change” means any change in design, operation, or maintenance practices that were documented in the comprehensive performance test plan, Notification of Compliance, or startup, shutdown, and malfunction plan. [40 CFR 63.1206(b)(5)(iii)]
- c. *Operating requirements – General.* [40 CFR 63.1206(c)(1)]
- (1) The permittee must operate only under the operating requirements specified in the Documentation of Compliance under 40 CFR 63.1211(c) or the Notification of Compliance under 40 CFR 63.1207(j) and 40 CFR 63.1210(d), except: [40 CFR 63.1206(c)(1)(i)]
- (i) During performance tests under approved test plans according to 40 CFR 63.1207(e), (f), and (g), and [40 CFR 63.1206(c)(1)(i)]
- (ii) Under the conditions of 40 CFR 63.1206(b)(1)(i) or (ii); [40 CFR 63.1206(c)(1)(ii)]
- (2) The Documentation of Compliance and the Notification of Compliance must contain operating requirements including, but not limited to, the operating requirements in 40 CFR 63.1206 and 40 CFR 63.1209; [40 CFR 63.1206(c)(1)(ii)]
- (3) Failure to comply with the operating requirements is failure to ensure compliance with the emission standards of 40 CFR 63, Subpart EEE; [40 CFR 63.1206(c)(1)(iii)]
- (4) Operating requirements in the Notification of Compliance are applicable requirements for purposes of 40 CFR parts 70 and 71; [40 CFR 63.1206(c)(1)(iv)]
- (5) The operating requirements specified in the Notification of Compliance are incorporated in this title V air permit by reference upon submittal. [40 CFR 63.1206(c)(1)(v)]
- (i) Within 15 days after submitting the Notification of Compliance following the initial comprehensive performance test, the permittee shall submit an application for a significant permit revision according to the requirements of 401 KAR 52:020, Sections 4 and 5 in order to incorporate the operating requirements directly in this title V air permit. [401 KAR 52:020, Section 10]
- d. *Startup, shutdown, and malfunction plan.* [40 CFR 63.1206(c)(2)]
- (1) The permittee is subject to the startup, shutdown, and malfunction plan requirements of 40 CFR 63.6(e)(3). [40 CFR 63.1206(c)(2)(i)]
- (i) The permittee must develop a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the standards of 40 CFR 63, Subpart EEE. The startup, shutdown, and malfunction plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation 40 CFR 63, Subpart EEE. This plan must be developed by the permittee by the source's compliance date for 40 CFR 63, Subpart EEE. The purpose of the startup, shutdown, and malfunction plan is to — [40 CFR 63.6(e)(3)(i)]
- (A) Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring

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

- equipment, in a manner which satisfies the general duty to minimize emissions established by 40 CFR 63.6(e)(3)(i); [40 CFR 63.6(e)(3)(i)(A)]
- (B) Ensure that the permittee is prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and [40 CFR 63.6(e)(3)(i)(B)]
- (C) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation). [40 CFR 63.6(e)(3)(i)(C)]
- (ii) When actions taken by the permittee during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the emission standards of 40 CFR 63, Subpart EEE), or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the permittee must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan and describes the actions taken for that event. In addition, the permittee must keep records of these events as specified in 40 CFR 63.10(b), including records of the occurrence and duration of each startup or shutdown (if the startup or shutdown causes the source to exceed any applicable emission limitation in the emission standards of 40 CFR 63, Subpart EEE), or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the permittee shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in 40 CFR 63.10(d)(5). [40 CFR 63.6(e)(3)(iii)]
- (2) Beginning November 30, 2026, the permittee must comply with the requirements in 40 CFR 63.1206(c)(2)(ii)(A) through (C). [40 CFR 63.1206(c)(2)(ii)]
- (i) The startup, shutdown, and malfunction plan must include a description of potential causes of malfunctions, including releases from emergency safety vents, that may result in significant releases of hazardous air pollutants, and actions the source is taking to minimize the frequency and severity of those malfunctions. [40 CFR 63.1206(c)(2)(ii)(A)]
- (ii) The permittee must submit the startup, shutdown, and malfunction plan to the Administrator for review and approval either postmarked within 180 days of June 3, 2026, or upon initial startup, whichever is later. The permittee must begin complying with the submitted startup, shutdown, and malfunction plan upon postmark while awaiting the Administrator's approval. If changes are made to the startup, shutdown, and malfunction plan as a result of the approval process, sources must begin complying with the revised startup, shutdown, and malfunction plan upon notification of approval. [40 CFR 63.1206(c)(2)(ii)(B)]
- (A) *Responsibility of the permittee.* The permittee is responsible for ensuring that the permittee submits any supplementary and additional information

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supporting their plan in a timely manner to enable the Administrator to consider whether to approve the plan. Neither the permittee's submittal of the plan, nor the Administrator's failure to approve or disapprove the plan, relieves the permittee of the responsibility to comply with the provisions of 40 CFR 63, Subpart EEE. [40 CFR 63.1206(c)(2)(ii)(B)(2)]

- (iii) *Changes to the plan that may significantly increase emissions.* [40 CFR 63.1206(c)(2)(ii)(C)]
 - (A) The permittee must request approval in writing from the Administrator within 5 days after making a change to the startup, shutdown, and malfunction plan that may significantly increase emissions of hazardous air pollutants. [40 CFR 63.1206(c)(2)(ii)(C)(1)]
 - (B) To request approval of such changes to the startup, shutdown, and malfunction plan, the permittee must follow the procedures provided by 40 CFR 63.1206(c)(2)(ii)(B) for initial approval of the plan. [40 CFR 63.1206(c)(2)(ii)(C)(2)]
- (3) The permittee must identify in the plan a projected oxygen correction factor based on normal operations to use during periods of startup and shutdown. [40 CFR 63.1206(c)(2)(iii)]
- (4) The permittee must record the plan in the operating record. [40 CFR 63.1206(c)(2)(iv)]
- (5) *Operating under the startup, shutdown, and malfunction plan* – [40 CFR 63.1206(c)(2)(v)]
 - (i) *Compliance with the AWFCO requirements during malfunctions.* [40 CFR 63.1206(c)(2)(v)(A)]
 - (A) During malfunctions, the automatic waste feed cutoff requirements of 40 CFR 63.1206(c)(3) continue to apply, except for 40 CFR 63.1206(c)(3)(v) and (vi). If the permittee exceeds an emission standard under 40 CFR 63, Subpart EEE monitored by a CEMS or operating limit specified under 40 CFR 63.1209, the automatic waste feed cutoff system must immediately and automatically cutoff the hazardous waste feed, except as provided by 40 CFR 63.1206(c)(3)(viii). If the malfunction itself prevents immediate and automatic cutoff of the hazardous waste feed, however, the permittee must cease feeding hazardous waste as quickly as possible. [40 CFR 63.1206(c)(2)(v)(A)(1)]
 - (B) Although the automatic waste feed cutoff requirements continue to apply during a malfunction, an exceedance of an emission standard monitored by a CEMS or operating limit specified under 40 CFR 63.1209 after a malfunction has occurred is not a violation of 40 CFR 63, Subpart EEE if: [40 CFR 63.1206(c)(2)(v)(A)(2)]
 - (1) The permittee took the actions to minimize the frequency and severity of the malfunction prescribed in the startup, shutdown, and malfunction plan prior to the malfunction; and [40 CFR 63.1206(c)(2)(v)(A)(2)(i)]
 - (2) The permittee takes the corrective measures prescribed in the startup, shutdown, and malfunction plan in response to the malfunction. [40 CFR 63.1206(c)(2)(v)(A)(2)(ii)]
 - (C) *Excessive exceedances during malfunctions.* For each set of 10 exceedances of an emission standard or operating requirement while hazardous waste remains

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in the combustion chamber (i.e., when the hazardous waste residence time has not transpired since the hazardous waste feed was cutoff) during a 60-day block period, the permittee must: [40 CFR 63.1206(c)(2)(v)(A)(3)]

- (1) Within 45 days of the 10th exceedance, complete an investigation of the cause of each exceedance and evaluation of approaches to minimize the frequency, duration, and severity of each exceedance, and revise the startup, shutdown, and malfunction plan as warranted by the evaluation to minimize the frequency, duration, and severity of each exceedance; and [40 CFR 63.1206(c)(2)(v)(A)(3)(i)]
- (2) Record the results of the investigation and evaluation in the operating record, and include a summary of the investigation and evaluation, and any changes to the startup, shutdown, and malfunction plan, in the excess emissions report required under 40 CFR 63.10(e)(3). [40 CFR 63.1206(c)(2)(v)(A)(3)(ii)]

e. *Requirements for periods of startup* – [40 CFR 63.1206(c)(10)]

- (1) *Startup*. Startup means the period in which a hazardous waste combustor begins operating for any purpose. When startup is conducted under an otherwise applicable standard according to 40 CFR 63.1206(b)(1)(ii), startup is defined in accordance with the otherwise applicable standard. The beginning and end of startup are defined as follows: [40 CFR 63.1206(c)(10)(i)]
 - (i) For incinerators, startup begins with the firing of supplemental fuel in the combustion chamber or with transitioning from a period of shutdown. All air pollution control devices must be in operation as expeditiously as possible and prior to the introduction of any waste material that is not supplemental fuel into the hazardous waste combustor. Startup ends once the system has stabilized but no later than 15 minutes after either hazardous waste that is not fed in accordance with 40 CFR 63.1206(c)(2)(v)(B) or any waste material that is not supplemental fuel is fed into the hazardous waste combustor, whichever occurs first. [40 CFR 63.1206(c)(10)(i)(A)]
 - (ii) Notwithstanding 40 CFR 63.1206(c)(10)(i)(A), transitioning from an otherwise applicable standard initiates a period of startup lasting no more than 15 minutes in duration. [40 CFR 63.1206(c)(10)(i)(E)]
- (2) *Beginning hazardous waste feed*. The permittee shall not start hazardous waste feed to the combustion chamber until the operating parameters and emission levels are within the limits specified in the Notification of Compliance under 40 CFR 63.1207(j) and 40 CFR 63.1210(d), unless the permittee does so in accordance with 40 CFR 63.1206(c)(2)(v)(B). [40 CFR 63.1206(c)(10)(ii)]
- (3) *Supplemental fuel*. Supplemental fuel is defined as one or a combination of the following fuels: natural gas, synthetic natural gas, propane, other gas 1 fuels, distillate oil, syngas, ultra-low sulfur diesel, kerosene, hydrogen, refinery gas, liquified petroleum gas, and any other fuel approved in the startup, shutdown, and malfunction plan. [40 CFR 63.1206(c)(10)(iii)]
 - (i) Other gas 1 fuels means a gaseous fuel that is not natural gas, refinery gas, or a hazardous waste and does not exceed a maximum mercury concentration of 40 micrograms per cubic meter of gas. The basis for determining that any gas

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- qualifies as an other gas 1 fuel must be specified in the startup, shutdown, and malfunction plan. [40 CFR 63.1206(c)(10)(iii)(B)]
- (4) *Startup, shutdown, and malfunction plan.* The permittee must operate in accordance with the permittee's startup, shutdown, and malfunction plan during periods of startup. See **1. Operating Limitations** d. [40 CFR 63.1206(c)(10)(iv)]
- f. *Requirements for periods of shutdown* – [40 CFR 63.1206(c)(11)]
- (1) *Shutdown.* Shutdown means the period in which a hazardous waste combustor ceases operating for any purpose. Operation under an otherwise applicable standard according to 40 CFR 63.1206(b)(1)(ii) is not considered a period of shutdown. When shutdown is conducted under an otherwise applicable standard according to 40 CFR 63.1206(b)(1)(ii), shutdown is defined in accordance with the otherwise applicable standard. The beginning and end of shutdown are defined as follows: [40 CFR 63.1206(c)(11)(i)]
- (i) For incinerators, shutdown begins when hazardous waste feed to the combustion chamber has been cut off for a period of time not less than the hazardous waste residence time and the feed of non-hazardous waste materials to the combustion chamber is cut off and ends when fire is extinguished in the combustion chamber, the incinerator enters another mode of operation, or when a startup is initiated. [40 CFR 63.1206(c)(11)(i)(A)]
- (2) *Hazardous waste feed.* The permittee shall not feed hazardous waste to the combustion chamber during shutdown, unless the permittee does so in accordance with 40 CFR 63.1206(c)(2)(v)(B). [40 CFR 63.1206(c)(11)(ii)]
- (3) *Supplemental fuel.* The permittee may feed supplemental fuel to the combustion chamber during shutdown. Supplemental fuel is as defined in 40 CFR 63.1206(c)(10)(iii). [40 CFR 63.1206(c)(11)(iii)]
- (4) *Startup, shutdown, and malfunction plan.* The permittee must operate in accordance with the permittee's startup, shutdown, and malfunction plan during periods of shutdown. See **1. Operating Limitations** d. [40 CFR 63.1206(c)(10)(iv)]
- g. *Automatic waste feed cutoff (AWFCO)* – [40 CFR 63.1206(c)(3)]
- (1) *General.* The permittee must operate the hazardous waste combustor with a functioning system that immediately and automatically cuts off the hazardous waste feed, except as provided by 40 CFR 63.1206(c)(3)(viii): [40 CFR 63.1206(c)(3)(i)]
- (i) When any of the following are exceeded: Operating parameter limits specified under 40 CFR 63.1209; an emission standard monitored by a CEMS; and the allowable combustion chamber pressure; [40 CFR 63.1206(c)(3)(i)(A)]
- (ii) When the span value of any CMS detector, except a CEMS, is met or exceeded; [40 CFR 63.1206(c)(3)(i)(B)]
- (iii) Upon malfunction of a CMS monitoring an operating parameter limit specified under 40 CFR 63.1209 or an emission level; or [40 CFR 63.1206(c)(3)(i)(C)]
- (iv) When any component of the automatic waste feed cutoff system fails. [40 CFR 63.1206(c)(3)(i)(D)]
- (2) *Ducting of combustion gases.* During an AWFCO, the permittee must continue to duct combustion gases to the air pollution control system while hazardous waste remains in the combustion chamber (i.e., if the hazardous waste residence time has

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- not transpired since the hazardous waste feed cutoff system was activated). [40 CFR 63.1206(c)(3)(ii)]
- (3) *Restarting waste feed.* The permittee must continue to monitor during the cutoff the operating parameters for which limits are established under 40 CFR 63.1209 and the emissions required under that section to be monitored by a CEMS, and the permittee must not restart the hazardous waste feed until the operating parameters and emission levels are within the specified limits. [40 CFR 63.1206(c)(3)(iii)]
- (4) *Failure of the AWFCO system.* If the AWFCO system fails to automatically and immediately cutoff the flow of hazardous waste upon exceedance of a parameter required to be interlocked with the AWFCO system under 40 CFR 63.1206(c)(3)(i), the permittee has failed to comply with the AWFCO requirements of 40 CFR 63.1206(c)(3). If an equipment or other failure prevents immediate and automatic cutoff of the hazardous waste feed, however, the permittee must cease feeding hazardous waste as quickly as possible. [40 CFR 63.1206(c)(3)(iv)]
- (5) *Corrective measures.* If, after any AWFCO, there is an exceedance of an emission standard or operating requirement, irrespective of whether the exceedance occurred while hazardous waste remained in the combustion chamber (i.e., whether the hazardous waste residence time has transpired since the hazardous waste feed cutoff system was activated), the permittee must investigate the cause of the AWFCO, take appropriate corrective measures to minimize future AWFCOs, and record the findings and corrective measures in the operating record. [40 CFR 63.1206(c)(3)(v)]
- (6) *Excessive exceedance reporting.* [40 CFR 63.1206(c)(3)(vi)]
- (i) For each set of 10 exceedances of an emission standard or operating requirement while hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not transpired since the hazardous waste feed was cutoff) during a 60-day block period, the permittee must submit to the Administrator a written report within 5 calendar days of the 10th exceedance documenting the exceedances and results of the investigation and corrective measures taken. [40 CFR 63.1206(c)(3)(vi)(A)]
- (ii) On a case-by-case basis, the Administrator may require excessive exceedance reporting when fewer than 10 exceedances occur during a 60-day block period. [40 CFR 63.1206(c)(3)(vi)(B)]
- (7) *Testing.* The AWFCO system and associated alarms must be tested at least weekly to verify operability, unless the permittee documents in the operating record that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, the permittee must conduct operability testing at least monthly. The permittee must document and record in the operating record AWFCO operability test procedures and results. [40 CFR 63.1206(c)(3)(vii)]
- (8) *Ramping down waste feed.* [40 CFR 63.1206(c)(3)(viii)]
- (i) The permittee may ramp down the waste feedrate of pumpable hazardous waste over a period not to exceed one minute, except as provided by 40 CFR 63.1206(c)(3)(viii)(B). If the permittee elects to ramp down the waste feed, the permittee must document ramp down procedures in the operating and maintenance plan. The procedures must specify that the ramp down begins immediately upon initiation of automatic waste feed cutoff and the procedures must prescribe a bona fide ramping down. If an emission standard or operating

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limit is exceeded during the ramp down, the permittee has failed to comply with the emission standards or operating requirements of 40 CFR 63, Subpart EEE. [40 CFR 63.1206(c)(3)(viii)(A)]

- (ii) If the automatic waste feed cutoff is triggered by an exceedance of any of the following operating limits, the permittee may not ramp down the waste feed cutoff: Minimum combustion chamber temperature, maximum hazardous waste feedrate, or any hazardous waste firing system operating limits that may be established for the permittee's combustor. [40 CFR 63.1206(c)(3)(viii)(B)]

h. *Combustion system leaks.* [40 CFR 63.1206(c)(5)]

- (1) Combustion system leaks of hazardous air pollutants must be controlled by: [40 CFR 63.1206(c)(5)(i)]
 - (i) Keeping the combustion zone sealed to prevent combustion system leaks; or [40 CFR 63.1206(c)(5)(i)(A)]
 - (ii) Maintaining the maximum combustion zone pressure lower than ambient pressure using an instantaneous monitor; or [40 CFR 63.1206(c)(5)(i)(B)]
 - (iii) Upon prior written approval of the Administrator, an alternative means of control to provide control of combustion system leaks equivalent to maintenance of combustion zone pressure lower than ambient pressure; or [40 CFR 63.1206(c)(5)(i)(C)]
 - (iv) Upon prior written approval of the Administrator, other technique(s) which can be demonstrated to prevent fugitive emissions without use of instantaneous pressure limits; and [40 CFR 63.1206(c)(5)(i)(D)]
- (2) The permittee must specify in the performance test plan and Notification of Compliance the method that will be used to control combustion system leaks. If the permittee controls combustion system leaks by maintaining the combustion zone pressure lower than ambient pressure using an instantaneous monitor, the permittee must also specify in the performance test plan and Notification of Compliance the monitoring and recording frequency of the pressure monitor, and specify how the monitoring approach will be integrated into the automatic waste feed cutoff system. [40 CFR 63.1206(c)(5)(ii)]

i. *Operator training and certification.* [40 CFR 63.1206(c)(6)]

- (1) The permittee must establish training programs for all categories of personnel whose activities may reasonably be expected to directly affect emissions of hazardous air pollutants from the source. Such persons include, but are not limited to, chief facility operators, control room operators, continuous monitoring system operators, persons that sample and analyze feedstreams, persons that manage and charge feedstreams to the combustor, persons that operate emission control devices, and ash and waste handlers. Each training program shall be of a technical level commensurate with the person's job duties specified in the training manual. Each commensurate training program shall require an examination to be administered by the instructor at the end of the training course. Passing of this test shall be deemed the "certification" for personnel, except that, for control room operators, the training and certification program shall be as specified in 40 CFR 63.1206(c)(6)(iii) through (vi). [40 CFR 63.1206(c)(6)(i)]

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- (2) The permittee must ensure that the source is operated and maintained at all times by persons who are trained and certified to perform these and any other duties that may affect emissions of hazardous air pollutants. A certified control room operator must be on duty at the site at all times the source is in operation. [40 CFR 63.1206(c)(6)(ii)]
- (3) Hazardous waste incinerator control room operators must: [40 CFR 63.1206(c)(6)(iii)]
 - (i) Be trained and certified under a site-specific, source-developed and implemented program that meets the requirements of 40 CFR 63.1206(c)(6)(v); or [40 CFR 63.1206(c)(6)(iii)(A)]
 - (ii) Be trained and certified under a state program. [40 CFR 63.1206(c)(6)(iii)(B)]
- (4) Site-specific, source developed and implemented training programs for control room operators must include the following elements: [40 CFR 63.1206(c)(6)(v)]
 - (i) Training on the following subjects: [40 CFR 63.1206(c)(6)(v)(A)]
 - (A) Environmental concerns, including types of emissions; [40 CFR 63.1206(c)(6)(v)(A)(1)]
 - (B) Basic combustion principles, including products of combustion; [40 CFR 63.1206(c)(6)(v)(A)(2)]
 - (C) Operation of the specific type of combustor used by the operator, including proper startup, waste firing, and shutdown procedures; [40 CFR 63.1206(c)(6)(v)(A)(3)]
 - (D) Combustion controls and continuous monitoring systems; [40 CFR 63.1206(c)(6)(v)(A)(4)]
 - (E) Operation of air pollution control equipment and factors affecting performance; [40 CFR 63.1206(c)(6)(v)(A)(5)]
 - (F) Inspection and maintenance of the combustor, continuous monitoring systems, and air pollution control devices; [40 CFR 63.1206(c)(6)(v)(A)(6)]
 - (G) Actions to correct malfunctions and conditions that may lead to malfunction;
 - (H) Residue characteristics and handling procedures; and [40 CFR 63.1206(c)(6)(v)(A)(7)]
 - (I) Applicable Federal, state, and local regulations, including Occupational Safety and Health Administration workplace standards; and [40 CFR 63.1206(c)(6)(v)(A)(8)]
 - (ii) An examination designed and administered by the instructor; and [40 CFR 63.1206(c)(6)(v)(B)]
 - (iii) Written material covering the training course topics that may serve as reference material following completion of the course. [40 CFR 63.1206(c)(6)(v)(C)]
- (5) To maintain control room operator qualification under a site-specific, source developed and implemented training program as provided by 40 CFR 63.1206(c)(6)(v), control room operators must complete an annual review or refresher course covering, at a minimum, the following topics: [40 CFR 63.1206(c)(6)(vi)]
 - (i) Update of regulations; [40 CFR 63.1206(c)(6)(vi)(A)]
 - (ii) Combustor operation, including startup and shutdown procedures, waste firing, and residue handling; [40 CFR 63.1206(c)(6)(vi)(B)]
 - (iii) Inspection and maintenance; [40 CFR 63.1206(c)(6)(vi)(C)]

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- (iv) Responses to malfunctions or conditions that may lead to malfunction; and [40 CFR 63.1206(c)(6)(vi)(D)]
- (v) Operating problems encountered by the operator. [40 CFR 63.1206(c)(6)(vi)(E)]
- j. *Operation and maintenance plan.* [40 CFR 63.1206(c)(7)]
 - (1) The permittee must prepare and at all times operate according to an operation and maintenance plan that describes in detail procedures for operation, inspection, maintenance, and corrective measures for all components of the combustor, including associated pollution control equipment, that could affect emissions of regulated hazardous air pollutants. [40 CFR 63.1206(c)(7)(i)]
 - (2) The plan must prescribe how the permittee will operate and maintain the combustor in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels achieved during the comprehensive performance test. [40 CFR 63.1206(c)(7)(ii)]
 - (3) This plan ensures compliance with the operation and maintenance requirements of 40 CFR 63.6(e) and minimizes emissions of pollutants, automatic waste feed cutoffs, and malfunctions. [40 CFR 63.1206(c)(7)(iii)]
- k. *Bag leak detection system requirements.* [40 CFR 63.1206(c)(8)]
 - (1) The permittee must continuously operate a bag leak detection system that meets the specifications and requirements of 40 CFR 63.1206(c)(8)(ii) and the permittee must comply with the corrective measures and notification requirements of 40 CFR 63.1206(c)(8)(iii) and (iv). [40 CFR 63.1206(c)(8)(i) and (c)(8)(i)(A)]
 - (2) *Bag leak detection system specification and requirements.* [40 CFR 63.1206(c)(8)(ii)]
 - (i) The bag leak detection system must be certified by the manufacturer to be capable of continuously detecting and recording particulate matter emissions at concentrations of 1.0 milligrams per actual cubic meter unless the permittee demonstrates, under 40 CFR 63.1209(g)(1), that a higher detection limit would routinely detect particulate matter loadings during normal operations; [40 CFR 63.1206(c)(8)(ii)(A)]
 - (ii) The bag leak detection system shall provide output of relative or absolute particulate matter loadings; [40 CFR 63.1206(c)(8)(ii)(B)]
 - (iii) The bag leak detection system shall be equipped with an alarm system that will sound an audible alarm when an increase in relative particulate loadings is detected over a preset level; [40 CFR 63.1206(c)(8)(ii)(C)]
 - (iv) The bag leak detection system shall be installed and operated in a manner consistent with available written guidance from the U.S. Environmental Protection Agency or, in the absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system; [40 CFR 63.1206(c)(8)(ii)(D)]
 - (v) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time; [40 CFR 63.1206(c)(8)(ii)(E)]
 - (vi) Following initial adjustment, the permittee must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed

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- in the operation and maintenance plan required under 40 CFR 63.1206(c)(7). The permittee must not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365 day period unless such adjustment follows a complete baghouse inspection which demonstrates the baghouse is in good operating condition; [40 CFR 63.1206(c)(8)(ii)(F)]
- (vii) For negative pressure or induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detector shall be installed downstream of the baghouse and upstream of any wet acid gas scrubber; and [40 CFR 63.1206(c)(8)(ii)(G)]
- (viii) Where multiple detectors are required, the system's instrumentation and alarm system may be shared among the detectors. [40 CFR 63.1206(c)(8)(ii)(H)]
- (3) *Bag leak detection system corrective measures requirements.* The operating and maintenance plan required by 40 CFR 63.1206(c)(7) must include a corrective measures plan that specifies the procedures the permittee will follow in the case of a bag leak detection system alarm or malfunction. The corrective measures plan must include, at a minimum, the procedures used to determine and record the time and cause of the alarm or bag leak detection system malfunction in accordance with the requirements of 40 CFR 63.1206(c)(8)(iii)(A) as well as the corrective measures taken to correct the control device or bag leak detection system malfunction or to minimize emissions in accordance with the requirements of 40 CFR 63.1206(c)(8)(iii)(B). Failure to initiate the corrective measures required by this paragraph is failure to ensure compliance with the emission standards in 40 CFR 63, Subpart EEE. [40 CFR 63.1206(c)(8)(iii)]
- (i) The permittee must initiate the procedures used to determine the cause of the alarm or bag leak detection system malfunction within 30 minutes of the time the alarm first sounds; and [40 CFR 63.1206(c)(8)(iii)(A)]
- (ii) The permittee must alleviate the cause of the alarm or bag leak detection system malfunction by taking the necessary corrective measure(s) which may include, but are not to be limited to, the following: [40 CFR 63.1206(c)(8)(iii)(B)]
- (A) Inspecting the baghouse for air leaks, torn or broken filter elements, or any other malfunction that may cause an increase in emissions; [40 CFR 63.1206(c)(8)(iii)(B)(1)]
- (B) Sealing off defective bags or filter media; [40 CFR 63.1206(c)(8)(iii)(B)(2)]
- (C) Replacing defective bags or filter media, or otherwise repairing the control device; [40 CFR 63.1206(c)(8)(iii)(B)(3)]
- (D) Sealing off a defective baghouse compartment; [40 CFR 63.1206(c)(8)(iii)(B)(4)]
- (E) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system; or [40 CFR 63.1206(c)(8)(iii)(B)(5)]
- (F) Shutting down the combustor. [40 CFR 63.1206(c)(8)(iii)(B)(6)]
- (4) *Excessive exceedances notification.* If the permittee operates the combustor when the detector response exceeds the alarm set-point or the bag leak detection system is malfunctioning more than 5 percent of the time during any 6-month block time period, the permittee must submit a notification to the Administrator within 30 days of the end of the 6-month block time period that describes the causes of the exceedances and bag leak detection system malfunctions and the revisions to the

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design, operation, or maintenance of the combustor, baghouse, or bag leak detection system the permittee is taking to minimize exceedances and bag leak detection system malfunctions. To document compliance with this requirement: [40 CFR 63.1206(c)(8)(iv)]

- (i) The permittee must keep records of the date, time, and duration of each alarm and bag leak detection system malfunction, the time corrective action was initiated and completed, and a brief description of the cause of the alarm or bag leak detection system malfunction and the corrective action taken; [40 CFR 63.1206(c)(8)(iv)(A)]
- (ii) The permittee must record the percent of the operating time during each 6-month period that the alarm sounds and the bag leak detection system malfunctions; [40 CFR 63.1206(c)(8)(iv)(B)]
- (iii) If inspection of the fabric filter demonstrates that no corrective action is required, then no alarm time is counted; and [40 CFR 63.1206(c)(8)(iv)(C)]
- (iv) If corrective action is required, each alarm shall be counted as a minimum of 1 hour. Each bag leak detection system malfunction shall also be counted as a minimum of 1 hour. [40 CFR 63.1206(c)(8)(iv)(D)]

1. *Analysis of feedstreams* – [40 CFR 63.1209(c)]

- (1) *General.* Prior to feeding the material, the permittee must obtain an analysis of each feedstream that is sufficient to document compliance with the applicable feedrate limits provided by 40 CFR 63.1209. [40 CFR 63.1209(c)(1)]

Operating Parameter Limits

- m. *When an operating parameter is applicable to multiple standards.* 40 CFR 63.1209(j) through (p) require the permittee to establish limits on operating parameters based on comprehensive performance testing to ensure the permittee maintains compliance with the emission standards of 40 CFR 63, Subpart EEE. For several parameters, the permittee must establish a limit for the parameter to ensure compliance with more than one emission standard. An example is a limit on minimum combustion chamber temperature to ensure compliance with both the DRE standard of 40 CFR 63.1209(j) and the dioxin/furan standard of 40 CFR 63.1209(k). If the performance tests for such standards are not performed simultaneously, the most stringent limit for a parameter derived from independent performance tests applies. [40 CFR 63.1209(i)]
- n. *Averaging periods.* The averaging periods specified in 40 CFR 63.1209 for operating parameters are not-to-exceed averaging periods. The permittee may elect to use shorter averaging periods. For example, the permittee may elect to use a 1-hour rolling average rather than the 12-hour rolling average specified in 40 CFR 63.1209(l)(1)(i) for mercury. [40 CFR 63.1209(r)]
- o. *Operating parameter limit for hydrocarbons.* If the permittee elects to comply with the carbon monoxide and hydrocarbon emission standard by continuously monitoring carbon monoxide with a CEMS (see **4. Specific Monitoring Requirements a.**), the permittee must demonstrate that hydrocarbon emissions during the comprehensive performance test do not exceed the hydrocarbon emissions standard. In addition, the limits the permittee

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establishes on the destruction and removal efficiency (DRE) operating parameters required under 40 CFR 63.1209(j) also ensure that the permittee maintains compliance with the hydrocarbon emission standard. If the permittee does not conduct the hydrocarbon demonstration and DRE tests concurrently, the permittee must establish separate operating parameter limits under 40 CFR 63.1209(j) based on each test and the more restrictive of the operating parameter limits applies. [40 CFR 63.1209(a)(7)]

- p. *DRE*. To remain in compliance with the destruction and removal efficiency (DRE) standard, the permittee must establish operating limits during the comprehensive performance test (or during a previous DRE test under provisions of 40 CFR 63.1206(b)(7)) for the following parameters, unless the limits are based on manufacturer specifications. The permittee must comply with those limits at all times that hazardous waste remains in the combustion chamber (i.e., the hazardous waste residence time has not transpired since the hazardous waste feed cutoff system was activated). When hazardous waste does not remain in the combustion chamber, the permittee is not required to comply with the operating limits pursuant to 40 CFR 63.1209(j): [40 CFR 63.1209(j)]
- (1) *Minimum combustion chamber temperature*. [40 CFR 63.1209(j)(1)]
 - (i) The permittee must measure the temperature of each combustion chamber at a location that best represents, as practicable, the bulk gas temperature in the combustion zone. The permittee must document the temperature measurement location in the test plan the permittee submits under 40 CFR 63.1207(e); [40 CFR 63.1209(j)(1)(i)]
 - (ii) The permittee must establish a minimum hourly rolling average limit as the average of the test run averages; [40 CFR 63.1209(j)(1)(ii)]
 - (2) *Maximum flue gas flowrate or production rate*. [40 CFR 63.1209(j)(2)]
 - (i) As an indicator of gas residence time in the control device, the permittee must establish and comply with a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that the permittee documents in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run. [40 CFR 63.1209(j)(2)(i)]
 - (ii) The permittee must comply with this limit on a hourly rolling average basis; [40 CFR 63.1209(j)(2)(ii)]
 - (3) *Maximum hazardous waste feedrate*. [40 CFR 63.1209(j)(3)]
 - (i) The permittee must establish limits on the maximum pumpable and total (i.e., pumpable and nonpumpable) hazardous waste feedrate for each location where hazardous waste is fed. [40 CFR 63.1209(j)(3)(i)]
 - (ii) The permittee must establish the limits as the average of the maximum hourly rolling averages for each run. [40 CFR 63.1209(j)(3)(ii)]
 - (iii) The permittee must comply with the feedrate limit(s) on a hourly rolling average basis; [40 CFR 63.1209(j)(3)(iii)]
 - (4) *Operation of waste firing system*. The permittee must specify operating parameters and limits to ensure that good operation of each hazardous waste firing system is maintained. [40 CFR 63.1209(j)(4)]

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

- (i) The permittee must establish a limit on minimum waste atomization pressure. [401 KAR 52:020, Section 10]
- q. *Dioxins and furans.* The permittee must comply with the dioxin and furans emission standard by establishing and complying with the following operating parameter limits. The permittee must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications. [40 CFR 63.1209(k)]
 - (1) *Gas temperature at the inlet to a dry particulate matter control device.* [40 CFR 63.1209(k)(1)]
 - (i) If the combustor is equipped with a baghouse (fabric filter), or other dry emissions control device where particulate matter is suspended in contact with combustion gas, the permittee must establish a limit on the maximum temperature of the gas at the inlet to the device on an hourly rolling average. The permittee must establish the hourly rolling average limit as the average of the test run averages. [40 CFR 63.1209(k)(1)(i)]
 - (2) *Minimum combustion chamber temperature.* [40 CFR 63.1209(k)(2)]
 - (i) The permittee must measure the temperature of each combustion chamber at a location that best represents, as practicable, the bulk gas temperature in the combustion zone. The permittee must document the temperature measurement location in the test plan the permittee submits under 40 CFR 63.1207(e) and (f); [40 CFR 63.1209(k)(2)(i)]
 - (ii) The permittee must establish a minimum hourly rolling average limit as the average of the test run averages. [40 CFR 63.1209(k)(2)(ii)]
 - (3) *Maximum flue gas flowrate or production rate.* [40 CFR 63.1209(k)(3)]
 - (i) As an indicator of gas residence time in the control device, the permittee must establish and comply with a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that the permittee documents in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run. [40 CFR 63.1209(k)(3)(i)]
 - (ii) The permittee must comply with this limit on a hourly rolling average basis; [40 CFR 63.1209(k)(3)(ii)]
 - (4) *Maximum hazardous waste feedrate.* [40 CFR 63.1209(k)(4)]
 - (i) The permittee must establish limits on the maximum pumpable and total (pumpable and nonpumpable) hazardous waste feedrate for each location where waste is fed. [40 CFR 63.1209(k)(4)(i)]
 - (ii) The permittee must establish the limits as the average of the maximum hourly rolling averages for each run. [40 CFR 63.1209(k)(4)(ii)]
 - (iii) The permittee must comply with the feedrate limit(s) on a hourly rolling average basis; [40 CFR 63.1209(k)(4)(iii)]
- r. *Mercury.* The permittee must comply with the mercury emission standard by establishing and complying with the following operating parameter limits. The permittee must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications. [40 CFR 63.1209(l)]
 - (1) *Feedrate of mercury.* [40 CFR 63.1209(l)(1)]

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

- (i) When complying with the mercury emission standards under 40 CFR 63.1219, the permittee must establish a 12-hour rolling average limit for the total feedrate of mercury in all feedstreams as the average of the test run averages. [40 CFR 63.1209(l)(1)(i)]
 - (ii) *Extrapolation of feedrate levels.* In lieu of establishing mercury feedrate limits as specified in 40 CFR 63.1209(l)(1)(i), the permittee may request as part of the performance test plan under 40 CFR 63.7(b) and (c) and 40 CFR 63.1207(e) and (f) to use the mercury feedrates and associated emission rates during the comprehensive performance test to extrapolate to higher allowable feedrate limits and emission rates. The extrapolation methodology will be reviewed and approved, as warranted, by the Administrator. The review will consider in particular whether: [40 CFR 63.1209(l)(1)(v)]
 - (A) Performance test metal feedrates are appropriate (i.e., whether feedrates are at least at normal levels; depending on the heterogeneity of the waste, whether some level of spiking would be appropriate; and whether the physical form and species of spiked material is appropriate); and [40 CFR 63.1209(l)(1)(v)(A)]
 - (B) Whether the extrapolated feedrates the permittee requests are warranted considering historical metal feedrate data. [40 CFR 63.1209(l)(1)(v)(B)]
- s. *Particulate matter.* The permittee must comply with the particulate matter emission standard by establishing and complying with the following operating parameter limits. The permittee must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications. [40 CFR 63.1209(m)]
 - (1) *Control device operating parameter limits (OPLs)* – [40 CFR 63.1209(m)(1)]
 - (i) *Other particulate matter control devices.* For each particulate matter control device that is not a fabric filter or high energy wet scrubber, or is not an electrostatic precipitator or ionizing wet scrubber for which the permittee elects to monitor particulate matter loadings under 40 CFR 63.1206(c)(9) for process control, the permittee must ensure that the control device is properly operated and maintained as required by 40 CFR 63.1206(c)(7) and by monitoring the operation of the control device as follows: [40 CFR 63.1209(m)(1)(iv)]
 - (A) During each comprehensive performance test conducted to demonstrate compliance with the particulate matter emissions standard, the permittee must establish a range of operating values for the control device that is a representative and reliable indicator that the control device is operating within the same range of conditions as during the performance test. The permittee must establish this range of operating values as follows: [40 CFR 63.1209(m)(1)(iv)(A)]
 - (1) The permittee must select a set of operating parameters appropriate for the control device design that the permittee determines to be a representative and reliable indicator of the control device performance. [40 CFR 63.1209(m)(1)(iv)(A)(1)]
 - (2) The permittee must measure and record values for each of the selected operating parameters during each test run of the performance test. A value

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

for each selected parameter must be recorded using a continuous monitor.

[40 CFR 63.1209(m)(1)(iv)(A)(2)]

- (3) For each selected operating parameter measured in accordance with the requirements of 40 CFR 63.1209(m)(1)(iv)(A)(1), the permittee must establish a minimum operating parameter limit or a maximum operating parameter limit, as appropriate for the parameter, to define the operating limits within which the control device can operate and still continuously achieve the same operating conditions as during the performance test. [40 CFR 63.1209(m)(1)(iv)(A)(3)]

- (4) The permittee must prepare written documentation to support the operating parameter limits established for the control device and the permittee must include this documentation in the performance test plan that the permittee submits for review and approval. This documentation must include a description for each selected parameter and the operating range and monitoring frequency required to ensure the control device is being properly operated and maintained.

[40 CFR 63.1209(m)(1)(iv)(A)(4)]

- (B) The permittee must install, calibrate, operate, and maintain a monitoring device equipped with a recorder to measure the values for each operating parameter selected in accordance with the requirements of 40 CFR 63.1209(m)(1)(iv)(A)(1). The permittee must install, calibrate, and maintain the monitoring equipment in accordance with the equipment manufacturer's specifications. The recorder must record the detector responses at least every 60 seconds, as required in the definition of continuous monitor. [40 CFR 63.1209(m)(1)(iv)(B)]

- (C) The permittee must regularly inspect the data recorded by the operating parameter monitoring system at a sufficient frequency to ensure the control device is operating properly. An excursion is determined to have occurred any time that the actual value of a selected operating parameter is less than the minimum operating limit (or, if applicable, greater than the maximum operating limit) established for the parameter in accordance with the requirements of 40 CFR 63.1209(m)(1)(iv)(A)(3).

[40 CFR 63.1209(m)(1)(iv)(C)]

- (D) Operating parameters selected in accordance with 40 CFR 63.1209(m)(1)(iv) may be based on manufacturer specifications provided the permittee supports the use of manufacturer specifications in the performance test plan that the permittee submits for review and approval. [40 CFR 63.1209(m)(1)(iv)(D)]

- (2) *Maximum flue gas flowrate or production rate.* [40 CFR 63.1209(m)(2)]

- (i) As an indicator of gas residence time in the control device, the permittee must establish a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that the permittee documents in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run. [40 CFR 63.1209(m)(2)(i)]

- (ii) The permittee must comply with this limit on a hourly rolling average basis; [40 CFR 63.1209(m)(2)(ii)]

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

(3) *Maximum ash feedrate.* The permittee must establish a maximum ash feedrate limit as a 12-hour rolling average based on the average of the test run averages.

- t. *Semivolatile metals and low volatility metals.* The permittee must comply with the semivolatile metal (cadmium and lead) and low volatile metal (arsenic, beryllium, and chromium) emission standards by establishing and complying with the following operating parameter limits. The permittee must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications. [40 CFR 63.1209(n)]

(1) *Maximum inlet temperature to dry particulate matter air pollution control device.*

The permittee must establish a limit on the maximum inlet temperature to the primary dry metals emissions control device (e.g., baghouse) on an hourly rolling average basis as the average of the test run averages. [40 CFR 63.1209(n)(1)]

(2) *Maximum feedrate of semivolatile and low volatile metals* – [40 CFR 63.1209(n)(2)]

(i) *General.* The permittee must establish feedrate limits for semivolatile metals (cadmium and lead) and low volatile metals (arsenic, beryllium, and chromium) as follows, except as provided by 40 CFR 63.1209(n)(2)(vii). [40 CFR 63.1209(n)(2)(i)]

(ii) When complying with the emissions standards under 40 CFR 63.1219, the permittee must establish 12-hour rolling average limits for the total feedrate of semivolatile and low volatile metals in all feedstreams as the average of the test run averages. [40 CFR 63.1209(n)(2)(ii)]

(iii) *LVM limits for pumpable wastes.* The permittee must establish separate feedrate limits for low volatile metals in pumpable feedstreams using the procedures prescribed above for total low volatile metals. Dual feedrate limits for both pumpable and total feedstreams are not required, however, if the permittee bases the total feedrate limit solely on the feedrate of pumpable feedstreams. [40 CFR 63.1209(n)(2)(vi)]

(iv) *Extrapolation of feedrate levels.* In lieu of establishing feedrate limits as specified in 40 CFR 63.1209(n)(2)(ii) and (vi), the permittee may request as part of the performance test plan under 40 CFR 63.7(b) and (c) and 40 CFR 63.1207(e) and (f) to use the semivolatile metal and low volatile metal feedrates and associated emission rates during the comprehensive performance test to extrapolate to higher allowable feedrate limits and emission rates. The extrapolation methodology will be reviewed and approved, as warranted, by the Administrator. The review will consider in particular whether: [40 CFR 63.1209(n)(2)(vii)]

(A) Performance test metal feedrates are appropriate (i.e., whether feedrates are at least at normal levels; depending on the heterogeneity of the waste, whether some level of spiking would be appropriate; and whether the physical form and species of spiked material is appropriate); and [40 CFR 63.1209(n)(2)(vii)(A)]

(B) Whether the extrapolated feedrates the permittee request are warranted considering historical metal feedrate data. [40 CFR 63.1209(n)(2)(vii)(B)]

(3) *Control device operating parameter limits (OPLs).* The permittee must establish operating parameter limits on the particulate matter control device as specified by 40 CFR 63.1209(m)(1); [40 CFR 63.1209(n)(3)]

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

- (4) *Maximum total chlorine and chloride feedrate.* The permittee must establish a 12-hour rolling average limit for the feedrate of total chlorine and chloride in all feedstreams as the average of the test run averages. [40 CFR 63.1209(n)(4)]
- (5) *Maximum flue gas flowrate or production rate.* [40 CFR 63.1209(n)(5)]
 - (i) As an indicator of gas residence time in the control device, the permittee must establish a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that the permittee documents in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run. [40 CFR 63.1209(n)(5)(i)]
 - (ii) The permittee must comply with this limit on a hourly rolling average basis. [40 CFR 63.1209(n)(5)(ii)]
- u. *Hydrogen chloride and chlorine gas.* The permittee must comply with the hydrogen chloride and chlorine gas emission standard by establishing and complying with the following operating parameter limits. The permittee must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications. [40 CFR 63.1209(o)]
 - (1) *Feedrate of total chlorine and chloride* – [40 CFR 63.1209(o)(1)]
 - (i) *Incinerators.* The permittee must establish a 12-hour rolling average limit for the total feedrate of chlorine (organic and inorganic) in all feedstreams as the average of the test run averages. [40 CFR 63.1209(o)(1)(i)]
 - (2) *Maximum flue gas flowrate or production rate.* [40 CFR 63.1209(o)(2)]
 - (i) As an indicator of gas residence time in the control device, the permittee must establish a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that the permittee documents in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run. [40 CFR 63.1209(o)(2)(i)]
 - (ii) The permittee must comply with this limit on a hourly rolling average basis; [40 CFR 63.1209(o)(2)(ii)]
 - (3) *Dry scrubber.* If the combustor is equipped with a dry scrubber, the permittee must establish the following operating parameter limits: [40 CFR 63.1209(o)(4)]
 - (i) *Minimum sorbent feedrate.* The permittee must establish a limit on minimum sorbent feedrate on an hourly rolling average as the average of the test run averages. [40 CFR 63.1209(o)(4)(i)]
 - (ii) *Minimum carrier fluid flowrate or nozzle pressure drop.* The permittee must establish a limit on minimum carrier fluid (gas or liquid) flowrate or nozzle pressure drop based on manufacturer's specifications. [40 CFR 63.1209(o)(4)(ii)]
 - (iii) *Sorbent specifications.* [40 CFR 63.1209(o)(4)(iii)]
 - (A) The permittee must specify and use the brand (i.e., manufacturer) and type of sorbent used during the comprehensive performance test until a subsequent comprehensive performance test is conducted, unless the permittee documents in the site-specific performance test plan required under 40 CFR 63.1207(e) and (f) key parameters that affect adsorption and establish limits on those parameters based on the sorbent used in the performance test. [40 CFR 63.1209(o)(4)(iii)(A)]

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

- (B) The permittee may substitute at any time a different brand or type of sorbent provided that the replacement has equivalent or improved properties compared to the sorbent used in the performance test and conforms to the key sorbent parameters the permittee identifies under 40 CFR 63.1209(o)(4)(iii)(A). The permittee must record in the operating record documentation that the substitute sorbent will provide the same level of control as the original sorbent. [40 CFR 63.1209(o)(4)(iii)(B)]

Other Operating Limitations

- v. *Maximum combustion chamber pressure.* If the permittee complies with the requirements for combustion system leaks under 40 CFR 63.1206(c)(5) by maintaining the maximum combustion chamber zone pressure lower than ambient pressure to prevent combustion systems leaks from hazardous waste combustion, the permittee must perform instantaneous monitoring of pressure and the automatic waste feed cutoff system must be engaged when negative pressure is not adequately maintained. [40 CFR 63.1209(p)]
- w. If the permittee fails to postmark a Notification of Compliance by the specified date (see **6. Specific Reporting Requirements** f.), the permittee must cease hazardous waste burning immediately. Prior to submitting a revised Notification of Compliance as provided by 40 CFR 63.1207(k)(3), the permittee may burn hazardous waste only for the purpose of pretesting or comprehensive performance testing and only for a maximum of 720 hours (renewable at the discretion of the Administrator). [40 CFR 63.1207(k)(1) and (k)(2)]
- x. *Failure of performance test* – [40 CFR 63.1207(l)]
- (1) *Comprehensive performance test.* [40 CFR 63.1207(l)(1)]
- (i) If the permittee determines (based on CEM recordings, results of analyses of stack samples, or results of CMS performance evaluations) that the permittee has exceeded any emission standard during a comprehensive performance test for a mode of operation, the permittee must cease hazardous waste burning immediately under that mode of operation. The permittee must make this determination within 90 days following completion of the performance test. [40 CFR 63.1207(l)(1)(i)]
- (ii) If the permittee has failed to demonstrate compliance with the emission standards for any mode of operation: [40 CFR 63.1207(l)(1)(ii)]
- (A) Prior to submitting a revised Notification of Compliance as provided by 40 CFR 63.1207(l)(1)(ii)(C), the permittee may burn hazardous waste only for the purpose of pretesting or comprehensive performance testing under revised operating conditions, and only for a maximum of 720 hours (renewable at the discretion of the Administrator), except as provided by 40 CFR 63.1207(l)(3); [40 CFR 63.1207(l)(1)(ii)(A)]
- (B) The permittee must conduct a comprehensive performance test under revised operating conditions following the requirements for performance testing of 40 CFR 63.1207; and see **6. Specific Reporting Requirements** i. [40 CFR 63.1207(l)(1)(ii)(B) and (C)]

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

- (2) *Confirmatory performance test.* If the permittee determines (based on CEM recordings, results of analyses of stack samples, or results of CMS performance evaluations) that the permittee has failed the dioxin/furan emission standard during a confirmatory performance test, the permittee must cease burning hazardous waste immediately. The permittee must make this determination within 90 days following completion of the performance test. To burn hazardous waste in the future: [40 CFR 63.1207(l)(2)]
- (i) Until the Notification of Compliance is submitted (see **6. Specific Reporting Requirements** j.), the permittee must not burn hazardous waste except for purposes of pretesting or confirmatory performance testing, and for a maximum of 720 hours (renewable at the discretion of the Administrator), except as provided by 40 CFR 63.1207(l)(3). [40 CFR 63.1207(l)(2)(iii)]
- y. To document compliance with the waiver of performance test provisions of 40 CFR 63.1207(m)(1), the permittee must: [40 CFR 63.1207(m)(1)(ii)]
- (1) See **4. Specific Monitoring Requirements** a.(1) through (3); and
- (2) Interlock the MTEC calculated in 40 CFR 63.1207(m)(1)(ii)(C) to the AWFCO system to stop hazardous waste burning when the MTEC exceeds the emission standard. [40 CFR 63.1207(m)(1)(ii)(D)]
- (3) In lieu of the requirement in 40 CFR 63.1207(m)(1)(ii)(C) and (D), the permittee may:
- (i) See **6. Specific Reporting Requirements** n.; and
- (ii) Interlock the minimum gas flowrate limit and maximum feedrate limit of 40 CFR 63.1207(m)(1)(iii)(A) to the AWFCO system to stop hazardous waste burning when the gas flowrate or mercury, semivolatile metals, low volatile metals, total fluorine and fluoride, and/or total chlorine and chloride feedrate exceeds the limits of 40 CFR 63.1207(m)(1)(iii)(A). [40 CFR 63.1207(m)(1)(iii)(B)]
- z. The permittee must begin complying with the SCR Operating Plan required by **6. Specific Reporting Requirements** r. upon submittal while awaiting the Division's approval. If changes are made to the SCR Operating Plan as a result of the approval process, the permittee must begin complying with the revised SCR Operating plan upon notification of approval. [401 KAR 52:020, Section 10]

2. Emission Limitations:

- a. *Compliance date for incinerators that burn hazardous waste – compliance date for standards under 40 CFR 63.1219* – [40 CFR 63.1206(a)(1) and 40 CFR 63.1206(a)(1)(ii)]
- (1) *New sources.* The permittee must comply with the new source emission standards under 40 CFR 63.1219 and the other requirements of 40 CFR 63, Subpart EEE by the date the source starts operations [40 CFR 63.1206(a)(1)(ii)(B) and 40 CFR 63.1206(a)(1)(ii)(B)(I) and (4)]
- b. The permittee must not discharge or cause combustion gases to be emitted into the atmosphere that contain: [40 CFR 63.1219(b)]

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

- (1) Dioxins and furans in excess of 0.11 ng TEQ/dscm corrected to 7 percent oxygen for incinerators equipped with a dry air pollution control system; [40 CFR 63.1219(b)(1)(i)]
 - (2) Mercury in excess of 8.1 µg/dscm, corrected to 7 percent oxygen; [40 CFR 63.1219(b)(2)]
 - (3) Cadmium and lead in excess of 10 µg/dscm, combined emissions, corrected to 7 percent oxygen; [40 CFR 63.1219(b)(3)]
 - (4) Arsenic, beryllium, and chromium in excess of 23 µg/dscm, combined emissions, corrected to 7 percent oxygen; [40 CFR 63.1219(b)(4)]
 - (5) For carbon monoxide and hydrocarbons, either: [40 CFR 63.1219(b)(5)]
 - (i) Carbon monoxide in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. If the permittee elects to comply with this carbon monoxide standard rather than the hydrocarbon standard under 40 CFR 63.1219(b)(5)(ii), the permittee must also document that, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by 40 CFR 63.1206(b)(7), hydrocarbons do not exceed 10 parts per million by volume during those runs, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane; or [40 CFR 63.1219(b)(5)(i)]
 - (ii) Hydrocarbons in excess of 10 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane; [40 CFR 63.1219(b)(5)(ii)]
 - (6) Hydrogen chloride and chlorine gas in excess of 21 parts per million by volume, combined emissions, expressed as a chloride (Cl⁻) equivalent, dry basis and corrected to 7 percent oxygen; [40 CFR 63.1219(b)(6)]
 - (7) Except as provided by 40 CFR 63.1219(e), particulate matter emissions in excess of 0.0016 gr/dscf corrected to 7 percent oxygen; and [40 CFR 63.1219(b)(7)]
- c. *Destruction and removal efficiency (DRE) standard* – [40 CFR 63.1219(c)]
- (1) Except as provided in 40 CFR 63.1219(c)(2), the permittee must achieve a destruction and removal efficiency (DRE) of 99.99% for each principle organic hazardous constituent (POHC) designated under 40 CFR 63.1219(c)(3). The permittee must calculate DRE from each POHC from equation 1 to 40 CFR 63.1219(c)(1). [40 CFR 63.1219(c)(1)]

$$\text{DRE} = [1 - (W_{\text{out}}/W_{\text{in}})] \times 100$$

Where: W_{in} = mass feedrate of one POHC in a waste feedstream; and
 W_{out} = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere
 - (2) *Principle organic hazardous constituent (POHC)*. [40 CFR 63.1219(c)(3)]
 - (i) The permittee must treat each POHC in the waste feed that the permittee specifies under 40 CFR 63.1219(c)(3)(ii) to the extent required by 40 CFR 63.1219(c)(1) and (2). [40 CFR 63.1219(c)(3)(i)]

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

- (ii) The permittee must specify one or more POHCs that are representative of the most difficult to destroy organic compounds in the permittee's hazardous waste feedstream. The permittee must base this specification on the degree of difficulty of incineration of the organic constituents in the hazardous waste and on their concentration or mass in the hazardous waste feed, considering the results of hazardous waste analyses or other data and information. [40 CFR 63.1219(c)(3)(ii)]

Compliance Demonstration Method:

- (a) The Administrator will determine compliance with the emission standards of 40 CFR 63, Subpart EEE as provided by 40 CFR 63.6(f)(2). Conducting performance testing under operating conditions representative of the extreme range of normal conditions is consistent with the requirement of 40 CFR 63.1207(g) to conduct performance testing under representative operating conditions. [40 CFR 63.1206(b)(2)]
- (b) The Administrator will make a finding concerning compliance with the emission standards and other requirements of 40 CFR 63, Subpart EEE as provided by 40 CFR 63.6(f)(3). [40 CFR 63.1206(b)(3)]
- (c) For compliance with the carbon monoxide and hydrocarbon emission standards, see **3. Testing Requirements f.**
- (d) For compliance with the DRE standard, see **5. Specific Recordkeeping Requirements h.**
- (e) The emission limits provided in 40 CFR 63.1219(b) are presented with two significant figures. Although the permittee must perform intermediate calculations using at least five significant figures, the permittee may round the resultant emission levels to two significant figures to document compliance. [40 CFR 63.1219(d)]
- d. The permittee shall not cause, suffer, allow, or permit the emission produced by the incineration of any substance to have greater than greater than twenty (20) percent opacity. [401 KAR 59:020, Section 3(1)]
- e. The permittee shall not cause to be discharged into the atmosphere from the incinerator any gases which contain particulate matter in excess of 0.23 g/dscm (one-tenth (0.1) gr/dscf) corrected to twelve (12) percent carbon dioxide excluding the contribution of carbon dioxide from auxiliary fuel. [401 KAR 59:020, Section 3(2)(b)]

Compliance Demonstration Method:

- (a) The permittee shall demonstrate initial compliance with the particulate matter emission limitation of 401 KAR 59:020 by measuring particulate matter emissions during the comprehensive performance test required by 40 CFR 63, Subpart EEE, and correcting to twelve (12) percent carbon dioxide. See **3. Testing Requirements p.**
- (b) The permittee shall demonstrate continuous compliance with the particulate matter emission and opacity limitations of 401 KAR 59:020 by operating according to the operating parameter limits of 40 CFR 63.1209(m) (see **1. Operating Limitations s.**) as

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

established during the comprehensive performance test which successfully demonstrated compliance.

- f. To preclude 401 KAR 51:017, the permittee must comply with the particulate emissions limitation of 40 CFR 63.1219(b)(7). [401 KAR 52:020, Section 10]
- g. See **Section D. 3.** for source-wide emission limitations on CO, NO_x, and SO_x to preclude 401 KAR 51:017.

Compliance Demonstration Method:

(a) For CO, see **4. Specific Monitoring Requirements a.** and **k.** and **5. Specific Recordkeeping Requirements k.**

(b) For NO_x and SO_x, see **7. Specific Control Equipment Operating Conditions**

3. Testing Requirements:

- a. *General.* The provisions of 40 CFR 63.7 apply, except 40 CFR 63.7(e)(1) and as noted in 40 CFR 63.1207. [40 CFR 63.1207(a)]
- b. *Types of performance tests* – [40 CFR 63.1207(b)]
 - (1) *Comprehensive performance test.* The permittee must conduct comprehensive performance tests to demonstrate compliance with the emission standards provided by 40 CFR 63, Subpart EEE, establish limits for the operating parameters provided by 40 CFR 63.1209, and demonstrate compliance with the performance specifications for continuous monitoring systems. [40 CFR 63.1207(b)(1)]
 - (2) *Confirmatory performance test.* The permittee must conduct confirmatory performance tests to: [40 CFR 63.1207(b)(2)]
 - (i) Demonstrate compliance with the dioxin/furan emission standard when the source operates under normal operating conditions; and [40 CFR 63.1207(b)(2)(i)]
 - (ii) Conduct a performance evaluation of continuous monitoring systems required for compliance assurance with the dioxin/furan emission standard under 40 CFR 63.1209(k). [40 CFR 63.1207(b)(2)(ii)]
- c. The permittee must conduct a minimum of three runs of a performance test required under 40 CFR 63.1207 to document compliance with the emissions standards of 40 CFR 63, Subpart EEE. The permittee must document compliance with the emission standards based on the arithmetic average of the emission results of each run, except that the permittee must document compliance with the destruction and removal efficiency standard for each run of the comprehensive performance test individually. [40 CFR 63.1206(b)(12)(i) and (ii)]
- d. *Initial comprehensive performance test* – [40 CFR 63.1207(c)]
 - (1) *Test date.* Except as provided by 40 CFR 63.1207(c)(2) and (3), the permittee must commence the initial comprehensive performance test not later than six months after the compliance date. [40 CFR 63.1207(c)(1)]

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

- e. *Frequency of testing.* Except as otherwise specified in 40 CFR 63.1207(d)(4), the permittee must conduct testing periodically as prescribed in 40 CFR 63.1207(d)(1) through (3). The date of commencement of the initial comprehensive performance test is the basis for establishing the deadline to commence the initial confirmatory performance test and the next comprehensive performance test. The permittee may conduct performance testing at any time prior to the required date. The deadline for commencing subsequent confirmatory and comprehensive performance testing is based on the date of commencement of the previous comprehensive performance test. Unless the Administrator grants a time extension under 40 CFR 63.1207(i), the permittee must conduct testing as follows: [40 CFR 63.1207(d)]
- (1) *Comprehensive performance testing.* Except as otherwise specified in 40 CFR 63.1207(d)(4), the permittee must commence testing no later than 61 months after the date of commencing the previous comprehensive performance test used to show compliance with 40 CFR 63.1219. If the permittee submits data in lieu of the initial performance test, the permittee must commence the subsequent comprehensive performance test within 61 months of commencing the test used to provide the data in lieu of the initial performance test. [40 CFR 63.1207(d)(1)]
 - (2) *Confirmatory performance testing.* Except as otherwise specified in 40 CFR 63.1207(d)(4), the permittee must commence confirmatory performance testing no later than 31 months after the date of commencing the previous comprehensive performance test used to show compliance with 40 CFR 63.1219. If the permittee submits data in lieu of the initial performance test, the permittee must commence the initial confirmatory performance test within 31 months of the date six months after the compliance date. To ensure that the confirmatory test is conducted approximately midway between comprehensive performance tests, the Administrator will not approve a test plan that schedules testing within 18 months of commencing the previous comprehensive performance test. [40 CFR 63.1207(d)(2)]
 - (3) *Duration of testing.* The permittee must complete performance testing within 60 days after the date of commencement, unless the Administrator determines that a time extension is warranted based on the permittee's documentation in writing of factors beyond the permittee's control that prevents the permittee from meeting the 60-day deadline. [40 CFR 63.1207(d)(3)]
- f. *Test methods.* The permittee must use the following test methods to determine compliance with the emission standards of 40 CFR 63, Subpart EEE. [40 CFR 63.1208(b)]
- (1) *Dioxins and furans.* [40 CFR 63.1208(b)(1)]
 - (i) To determine compliance with the emission standards for dioxins and furans, the permittee must use: [40 CFR 63.1208(b)(1)(i)]
 - (A) Before June 3, 2029, EPA Method 0023A, Sampling Method for Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans emissions from Stationary Sources, EPA Publication SW-846 (incorporated by reference—see 40 CFR 63.14). After June 3, 2029, EPA Method 0023A is no longer allowed; or [40 CFR 63.1208(b)(1)(i)(A)]
 - (B) EPA Method 23 of appendix A-7 to 40 CFR part 60. [40 CFR 63.1208(b)(1)(i)(B)]

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

- (ii) The permittee must sample for a minimum of three hours, and the permittee must collect a minimum sample volume of 2.5 dscm; [40 CFR 63.1208(b)(1)(ii)]
 - (iii) The permittee may assume that nondetects are present at zero concentration. [40 CFR 63.1208(b)(1)(iii)]
 - (2) *Mercury*. The permittee must use Method 29 of appendix A-8 to 40 CFR part 60 to demonstrate compliance with emission standard for mercury. [40 CFR 63.1208(b)(2)]
 - (3) *Cadmium and lead*. The permittee must use EPA Method 29 of appendix A-8 to 40 CFR part 60 to determine compliance with the emission standard for cadmium and lead (combined). [40 CFR 63.1208(b)(3)]
 - (4) *Arsenic, beryllium, and chromium*. The permittee must use EPA Method 29 of appendix A-8 to 40 CFR part 60 to determine compliance with the emission standard for arsenic, beryllium, and chromium (combined). [40 CFR 63.1208(b)(4)]
 - (5) *Hydrogen chloride and chlorine gas – Compliance with MACT standards*. To determine compliance with the emission standard for hydrogen chloride and chlorine gas (combined), the permittee must use: [40 CFR 63.1208(b)(5)(i)]
 - (i) EPA Method 26 or 26A of appendix A-8 to 40 CFR part 60; or [40 CFR 63.1208(b)(5)(i)(A)]
 - (ii) EPA Method 320 or 321 of appendix A to 40 CFR part 63 for hydrogen chloride and the back-half, caustic impingers of EPA Method 26 or 26A of appendix A-8 to 40 CFR part 60 to measure chlorine gas. [40 CFR 63.1208(b)(5)(i)(B)]
 - (6) *Particulate matter*. The permittee must use EPA Method 5 or 5I of appendix A-3 to 40 CFR part 60 to demonstrate compliance with the emission standard for particulate matter. [40 CFR 63.1208(b)(8)]
 - (7) *DRE*. The test method selected by the permittee for volatile and/or semivolatile organic compounds must be approved in the comprehensive performance test plan. [40 CFR 63.1208(b)(9)]
 - (8) *Feedstream analytical methods*. The permittee may use any reliable analytical method to determine feedstream concentrations of metals, chlorine, fluorine, and other constituents. It is the permittee's responsibility to ensure that the sampling and analysis procedures are unbiased, precise, and that the results are representative of the feedstream. [40 CFR 63.1208(b)(10)]
- g. 40 CFR 63.1206(b)(6) applies if the permittee elects to comply with the carbon monoxide and hydrocarbon emissions standards of 40 CFR 63, Subpart EEE by documenting continuous compliance with the carbon monoxide standard using a continuous emissions monitoring system and documenting compliance with the hydrocarbon standard during the destruction and removal efficiency (DRE) performance test or its equivalent. [40 CFR 63.1206(b)(6)]
- (1) If a DRE test performed pursuant to 40 CFR 63.1207(c)(2) is acceptable as documentation of compliance with the DRE standard, the permittee may use the highest hourly rolling average hydrocarbon level achieved during the DRE test runs to document compliance with the hydrocarbon standard. An acceptable DRE test is any test for which the data and results are determined to meet quality assurance objectives (on a site-specific basis) such that the results adequately demonstrate compliance with the DRE standard. [40 CFR 63.1206(b)(6)(i)]

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

- (2) If during this acceptable DRE test the permittee did not obtain hydrocarbon emissions data sufficient to document compliance with the hydrocarbon standard, the permittee must either: [40 CFR 63.1206(b)(6)(ii)]
 - (i) Perform, as part of the performance test, an “equivalent DRE test” to document compliance with the hydrocarbon standard. An equivalent DRE test is comprised of a minimum of three runs each with a minimum duration of one hour during which the permittee operates the combustor as close as reasonably possible to the operating parameter limits that the permittee established based on the initial DRE test. The permittee must use the highest hourly rolling average hydrocarbon emission level achieved during the equivalent DRE test to document compliance with the hydrocarbon standard; or [40 CFR 63.1206(b)(6)(ii)(A)]
 - (ii) Perform a DRE test as part of the performance test. [40 CFR 63.1206(b)(6)(ii)(B)]
- h. For compliance with the DRE standard: [40 CFR 63.1206(b)(7)]
 - (1) Except as provided in 40 CFR 63.1206(b)(7)(ii) and (iii): [40 CFR 63.1206(b)(7)(i)]
 - (i) The permittee must document compliance with the Destruction and Removal Efficiency (DRE) standard under 40 CFR 63, Subpart EEE only once provided that the permittee does not modify the source after the DRE test in a manner that could affect the ability of the source to achieve the DRE standard. [40 CFR 63.1206(b)(7)(i)(A)]
 - (ii) The permittee may use any DRE test data that documents that the permittee’s source achieves the required level of DRE provided: [40 CFR 63.1206(b)(7)(i)(B)]
 - (A) The permittee has not modified the design or operation of their source in a manner that could affect the ability of their source to achieve the DRE standard since the DRE test was performed; and, [40 CFR 63.1206(b)(7)(i)(B)(1)]
 - (B) The DRE test data meet quality assurance objectives determined on a site-specific basis. [40 CFR 63.1206(b)(7)(i)(B)(2)]
 - (2) *Sources that feed hazardous waste at locations other than the normal flame zone.* [40 CFR 63.1206(b)(7)(ii)]
 - (i) Except as provided by 40 CFR 63.1206(b)(7)(ii)(B), if the permittee feeds hazardous waste at a location in the combustion system other than the normal flame zone, then the permittee must demonstrate compliance with the DRE standard during each comprehensive performance test; [40 CFR 63.1206(b)(7)(ii)(A)]
 - (ii) If at any time the permittee changes their design, operation, and maintenance features in a manner that could reasonably be expected to affect their ability to meet the DRE standard, then the permittee must comply with the requirements of 40 CFR 63.1206(b)(7)(ii)(A). [40 CFR 63.1206(b)(7)(ii)(B)(2)]
 - (3) For sources that do not use DRE previous testing to document conformance with the DRE standard pursuant to 40 CFR 63.1207(c)(2), the permittee must perform DRE testing during the initial comprehensive performance test. [40 CFR 63.1206(b)(7)(iii)]
- i. *Operating parameter limit for hydrocarbons.* If the permittee elects to comply with the carbon monoxide and hydrocarbon emission standard by continuously monitoring carbon

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

monoxide with a CEMS (see **4. Specific Monitoring Requirements a.**), the permittee must demonstrate that hydrocarbon emissions during the comprehensive performance test do not exceed the hydrocarbon emissions standard. If the permittee does not conduct the hydrocarbon demonstration and DRE tests concurrently, the permittee must establish separate operating parameter limits under 40 CFR 63.1209(j) based on each test and the more restrictive of the operating parameter limits applies. [40 CFR 63.1209(a)(7)]

- j. *Content of performance test plan.* The provisions of 40 CFR 63.7(c)(2)(i) through (iii) and (v) regarding the content of the test plan apply. In addition, the permittee must include the following information in the test plan: [40 CFR 63.1207(f)]
- (1) *Content of comprehensive performance test plan.* [40 CFR 63.1207(f)(1)]
- (i) An analysis of each feedstream, including hazardous waste, other fuels, and industrial furnace feedstocks, as fired, that includes: [40 CFR 63.1207(f)(1)(i)]
 - (A) Heating value, levels of ash, levels of semivolatile metals, low volatile metals, mercury, and total chlorine (organic and inorganic); and [40 CFR 63.1207(f)(1)(i)(A)]
 - (B) Viscosity or description of the physical form of the feedstream; [40 CFR 63.1207(f)(1)(i)(B)]
 - (ii) For organic hazardous air pollutants established by 42 U.S.C. 7412(b)(1), as amended by 40 CFR 63, Subpart C: [40 CFR 63.1207(f)(1)(ii)]
 - (A) Except as provided by 40 CFR 63.1207(f)(1)(ii)(D), an identification of such organic hazardous air pollutants that are present in each hazardous waste feedstream. The permittee need not analyze for organic hazardous air pollutants that would reasonably not be expected to be found in the feedstream. The permittee must identify any constituents the permittee excludes from analysis and explain the basis for excluding them. The permittee must conduct the feedstream analysis according to 40 CFR 63.1208(b)(8); [40 CFR 63.1207(f)(1)(ii)(A)]
 - (B) An approximate quantification of such identified organic hazardous air pollutants in the hazardous waste feedstreams, within the precision produced by analytical procedures of 40 CFR 63.1208(b)(8); and
 - (C) A description of blending procedures, if applicable, prior to firing the hazardous waste feedstream, including a detailed analysis of the materials prior to blending, and blending ratios. [40 CFR 63.1207(f)(1)(ii)(C)]
 - (D) The Administrator may approve on a case-by-case basis a hazardous waste feedstream analysis for organic hazardous air pollutants in lieu of the analysis required under 40 CFR 63.1207(f)(1)(ii)(A) if the reduced analysis is sufficient to ensure that the POHCs used to demonstrate compliance with the applicable DRE standards of 40 CFR 63, Subpart EEE continue to be representative of the most difficult to destroy organic compounds in the permittee's hazardous waste feedstreams; [40 CFR 63.1207(f)(1)(ii)(D)]
 - (iii) A detailed engineering description of the hazardous waste combustor, including: [40 CFR 63.1207(f)(1)(iii)]
 - (A) Manufacturer's name and model number of the hazardous waste combustor; [40 CFR 63.1207(f)(1)(iii)(A)]
 - (B) Type of hazardous waste combustor; [40 CFR 63.1207(f)(1)(iii)(B)]

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- (C) Maximum design capacity in appropriate units; [40 CFR 63.1207(f)(1)(iii)(C)]
- (D) Description of the feed system for each feedstream; [40 CFR 63.1207(f)(1)(iii)(D)]
- (E) Capacity of each feed system; [40 CFR 63.1207(f)(1)(iii)(E)]
- (F) Description of automatic hazardous waste feed cutoff system(s); [40 CFR 63.1207(f)(1)(iii)(F)]
- (G) Description of the design, operation, and maintenance practices for any air pollution control system; and [40 CFR 63.1207(f)(1)(iii)(G)]
- (H) Description of the design, operation, and maintenance practices of any stack gas monitoring and pollution control monitoring systems; [40 CFR 63.1207(f)(1)(iii)(H)]
- (iv) A detailed description of sampling and monitoring procedures including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis; [40 CFR 63.1207(f)(1)(iv)]
- (v) A detailed test schedule for each hazardous waste for which the performance test is planned, including date(s), duration, quantity of hazardous waste to be burned, and other relevant factors; [40 CFR 63.1207(f)(1)(v)]
- (vi) A detailed test protocol, including, for each hazardous waste identified, the ranges of hazardous waste feedrate for each feed system, and, as appropriate, the feedrates of other fuels and feedstocks, and any other relevant parameters that may affect the ability of the hazardous waste combustor to meet the emission standards; [40 CFR 63.1207(f)(1)(vi)]
- (vii) A description of, and planned operating conditions for, any emission control equipment that will be used; [40 CFR 63.1207(f)(1)(vii)]
- (viii) Procedures for rapidly stopping the hazardous waste feed and controlling emissions in the event of an equipment malfunction; [40 CFR 63.1207(f)(1)(viii)]
- (ix) A determination of the hazardous waste residence time as required by 40 CFR 63.1206(b)(11); [40 CFR 63.1207(f)(1)(ix)]
- (x) If the permittee is requesting to extrapolate metal feedrate limits from comprehensive performance test levels under 40 CFR 63.1209(l)(1)(v) or (n)(2)(vii): [40 CFR 63.1207(f)(1)(x)]
 - (A) A description of the extrapolation methodology and rationale for how the approach ensures compliance with the emission standards; [40 CFR 63.1207(f)(1)(x)(A)]
 - (B) Documentation of the historical range of normal (i.e., other than during compliance testing) metals feedrates for each feedstream; [40 CFR 63.1207(f)(1)(x)(B)]
 - (C) Documentation that the level of spiking recommended during the performance test will mask sampling and analysis imprecision and inaccuracy to the extent that the extrapolated feedrate limits adequately assure compliance with the emission standards; [40 CFR 63.1207(f)(1)(x)(C)]
- (xi) If the permittee does not continuously monitor regulated constituents in natural gas, process air feedstreams, and feedstreams from vapor recovery systems under 40 CFR 63.1209(c)(5), the permittee must include documentation of the expected levels of regulated constituents in those feedstreams; [40 CFR 63.1207(f)(1)(xi)]

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

- (xii) Documentation justifying the duration of system conditioning required to ensure the combustor has achieved steady-state operations under performance test operating conditions, as provided by 40 CFR 63.1207(g)(1)(iii); [40 CFR 63.1207(f)(1)(xii)]
- (xiii) If the permittee is not required to conduct performance testing to document compliance with the mercury, semivolatile metals, low volatile metals, or hydrogen chloride/chlorine gas emission standards under 40 CFR 63.1207(m), the permittee must include with the comprehensive performance test plan documentation of compliance with the provisions of that section. [40 CFR 63.1207(f)(1)(xvi)]
- (xiv) If the permittee proposes to use a surrogate for measuring or monitoring gas flowrate, the permittee must document in the comprehensive performance test plan that the surrogate adequately correlates with gas flowrate, as required by 40 CFR 63.1207(m)(5), and 40 CFR 63.1209(j)(2), (k)(3), (m)(2)(i), (n)(5)(i), and (o)(2)(i). [40 CFR 63.1207(f)(1)(xvii)]
- (xv) The permittee must submit an application to request alternative monitoring under 40 CFR 63.1209(g)(1) not later than with the comprehensive performance test plan, as required by 40 CFR 63.1209(g)(1)(iii)(A). [40 CFR 63.1207(f)(1)(xviii)]
- (xvi) The permittee must document the temperature location measurement in the comprehensive performance test plan, as required by 40 CFR 63.1209(j)(1)(i) and (k)(2)(i). [40 CFR 63.1207(f)(1)(xix)]
- (xvii) For purposes of calculating semivolatile metal, low volatile metal, mercury, total fluorine (organic and inorganic), and total chlorine (organic and inorganic), and ash feedrate limits, a description of how the permittee will handle performance test feedstream analytical results that determines these constituents are not present at detectable levels. [40 CFR 63.1207(f)(1)(xxvi)]
- (xviii) Such other information as the Administrator reasonably finds necessary to determine whether to approve the performance test plan. [40 CFR 63.1207(f)(1)(xxvii)]
- (2) *Content of confirmatory test plan.* [40 CFR 63.1207(f)(2)]
 - (i) A description of the permittee's normal hydrocarbon or carbon monoxide operating levels, as specified in 40 CFR 63.1207(g)(2)(i), and an explanation of how these normal levels were determined; [40 CFR 63.1207(f)(2)(i)]
 - (ii) A description of the permittee's normal applicable operating parameter levels, as specified in 40 CFR 63.1207(g)(2)(ii), and an explanation of how these normal levels were determined; [40 CFR 63.1207(f)(2)(ii)]
 - (iii) A description of the permittee's normal chlorine operating levels, as specified in 40 CFR 63.1207(g)(2)(iii), and an explanation of how these normal levels were determined; [40 CFR 63.1207(f)(2)(iii)]
 - (iv) A detailed description of sampling and monitoring procedures including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis; [40 CFR 63.1207(f)(2)(v)]
 - (v) A detailed test schedule for each hazardous waste for which the performance test is planned, including date(s), duration, quantity of hazardous waste to be burned, and other relevant factors; [40 CFR 63.1207(f)(2)(vi)]

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

- (vi) A detailed test protocol, including, for each hazardous waste identified, the ranges of hazardous waste feedrate for each feed system, and, as appropriate, the feedrates of other fuels and feedstocks, and any other relevant parameters that may affect the ability of the hazardous waste combustor to meet the dioxin/furan emission standard; [40 CFR 63.1207(f)(2)(vii)]
 - (vii) A description of, and planned operating conditions for, any emission control equipment that will be used; [40 CFR 63.1207(f)(2)(viii)]
 - (viii) Procedures for rapidly stopping the hazardous waste feed and controlling emissions in the event of an equipment malfunction; and [40 CFR 63.1207(f)(2)(ix)]
 - (ix) Such other information as the Administrator reasonably finds necessary to determine whether to approve the confirmatory test plan. [40 CFR 63.1207(f)(2)(x)]
- k. *Operating conditions during testing.* The permittee must comply with the provisions of 40 CFR 63.7(e)(2) through (4). The permittee may not conduct performance tests during periods of startup, shutdown, or malfunction. The permittee must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent the entire range of normal operation, including operational conditions for maximum emissions. The permittee shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. Conducting performance testing under operating conditions representative of the extreme range of normal conditions is consistent with the requirements of 40 CFR 63.6(f)(2)(iii)(B) and 40 CFR 63.1207 to conduct performance testing under representative operating conditions. [40 CFR 63.1207(g)]
- (1) *Comprehensive performance testing* – [40 CFR 63.1207(g)(1)]
 - (i) *Operations during testing.* For the following parameters, the permittee must operate the combustor during the performance test under normal conditions (or conditions that will result in higher than normal emissions): [40 CFR 63.1207(g)(1)(i)]
 - (A) *Chlorine feedrate.* The permittee must feed normal (or higher) levels of chlorine during the dioxin/furan performance test; [40 CFR 63.1207(g)(1)(i)(A)]
 - (B) *Ash feedrate.* The permittee must conduct the following tests when feeding normal (or higher) levels of ash: The semivolatile metal and low volatile metal performance tests; and [40 CFR 63.1207(g)(1)(i)(B)]
 - (C) *Cleaning cycle of the particulate matter control device.* The permittee must conduct the following tests when the particulate matter control device undergoes its normal (or more frequent) cleaning cycle: The particulate matter, semivolatile metal, and low volatile metal performance tests. [40 CFR 63.1207(g)(1)(i)(C)]
 - (ii) *Modes of operation.* Given that the permittee must establish limits for the applicable operating parameters specified in 40 CFR 63.1209 based on operations during the comprehensive performance test, the permittee may conduct testing

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

under two or more operating modes to provide operating flexibility. [40 CFR 63.1207(g)(1)(ii)]

(iii) *Steady-state conditions*. [40 CFR 63.1207(g)(1)(iii)]

(A) Prior to obtaining performance test data, the permittee must operate under performance test conditions until the permittee reaches steady-state operations with respect to emissions of pollutants the permittee must measure during the performance test and operating parameters under 40 CFR 63.1209 for which the permittee must establish limits. During system conditioning, the permittee must ensure that each operating parameter for which the permittee must establish a limit is held at the level planned for the performance test. The permittee must include documentation in the performance test plan under 40 CFR 63.1207(f) justifying the duration of system conditioning. [40 CFR 63.1207(g)(1)(iii)(A)]

(2) *Confirmatory performance testing*. The permittee must conduct confirmatory performance testing for dioxin/furan under normal operating conditions for the following parameters: [40 CFR 63.1207(g)(2)]

(i) Carbon monoxide (or hydrocarbon) CEMS emissions levels must be below the emission limit established for the hazardous waste combustor; [40 CFR 63.1207(g)(2)(i)]

(ii) Each operating limit (specified in 40 CFR 63.1209) established to maintain compliance with the dioxin/furan emission standard must be held within the range of the average value over the previous 12 months and the maximum or minimum, as appropriate, that is allowed, except as provided by 40 CFR 63.1207(g)(2)(v). The average value is defined as the sum of the rolling average values recorded over the previous 12 months, divided by the number of rolling averages recorded during that time. The average value must not include calibration data, startup data, shutdown data, malfunction data, and data obtained when not burning hazardous waste; [40 CFR 63.1207(g)(2)(ii)]

(iii) The permittee must feed chlorine at normal feedrates or greater; and [40 CFR 63.1207(g)(2)(iii)]

(iv) The Administrator may approve an alternative range to that required by 40 CFR 63.1207(g)(2)(i) and (ii) if the permittee documents in the confirmatory performance test plan that it may be problematic to maintain the required range during the test. In addition, when making the finding of compliance, the Administrator may consider test conditions outside of the range specified in the test plan based on a finding that the permittee could not reasonably maintain the range specified in the test plan and considering factors including whether the time duration and level of the parameter when operations were out of the specified range were such that operations during the confirmatory test are determined to be reasonably representative of normal operations. In addition, the Administrator will consider the proximity of the emission test results to the standard. [40 CFR 63.1207(g)(2)(v)]

1. *Operating conditions during subsequent testing*. [40 CFR 63.1207(h)]

(1) Current operating parameter limits established under 40 CFR 63.1209 are waived during subsequent comprehensive performance testing. [40 CFR 63.1207(h)(1)]

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

- (2) Current operating parameter limits are also waived during pretesting prior to comprehensive performance testing for an aggregate time not to exceed 720 hours of operation (renewable at the discretion of the Administrator) under an approved test plan or if the source records the results of the pretesting. Pretesting means: [40 CFR 63.1207(h)(2)]
 - (i) Operations when stack emissions testing for dioxin/furan, mercury, semivolatile metals, low volatile metals, particulate matter, or hydrogen chloride/chlorine gas is being performed; and [40 CFR 63.1207(h)(2)(i)]
 - (ii) Operations to reach steady-state operating conditions prior to stack emissions testing under 40 CFR 63.1207(g)(1)(iii). [40 CFR 63.1207(h)(2)(ii)]
- m. *Waiver of performance test.* The permittee is not required to conduct performance tests to document compliance with the mercury, semivolatile metals, low volatile metals, or hydrogen chloride/chlorine gas emission standards under the conditions specified in 40 CFR 63.1207(m)(1) or (2). The waiver provisions of 40 CFR 63.1207(m), apply in addition to the provisions of 40 CFR 63.7(h). [40 CFR 63.1207(m)]
 - (1) *Emission standards based on exhaust gas flow rate.* [40 CFR 63.1207(m)(1)]
 - (i) The permittee is deemed to be in compliance with an emission standard based on the volumetric flow rate of exhaust gas (i.e., µg/dscm or ppmv) if the maximum theoretical emission concentration (MTEC) does not exceed the emission standard over the relevant averaging period specified under 40 CFR 63.1209(l), (n), and (o) for the standard: [40 CFR 63.1207(m)(1)(i)]
 - (A) Determine the feedrate of mercury, semivolatile metals, low volatile metals, total fluorine or fluoride, or total chlorine and chloride from all feedstreams; [40 CFR 63.1207(m)(1)(i)(A)]
 - (B) Determine the stack gas flowrate; and [40 CFR 63.1207(m)(1)(i)(B)]
 - (C) Calculate a MTEC for each standard assuming all mercury, semivolatile metals, low volatile metals, total fluorine (organic and inorganic), or total chlorine (organic and inorganic) from all feedstreams is emitted; [40 CFR 63.1207(m)(1)(i)(C)]
 - (ii) To document compliance with this provision, 40 CFR 63.1207(m), see **1. Operating Limitations y.**, **4. Specific Monitoring Requirements a.**, and **5. Specific Recordkeeping Requirements a(17)**. [40 CFR 63.1207(m)(1)(ii)]
 - (iii) In lieu of the requirement in 40 CFR 63.1207(m)(1)(ii)(C) and (D), the permittee may comply with 40 CFR 63.1207(m)(1)(iii)(A) and (B). See **1. Operating Limitations y(3)(ii)** and **6. Specific Reporting Requirements n**. [40 CFR 63.1207(m)(1)(iii)]
 - (2) When determining the feedrate of mercury, semivolatile metals, low volatile metals, or total chlorine and chloride for purposes of this provision, 40 CFR 63.1207(m) the permittee must assume that the analyte is present at the full detection limit when the feedstream analysis determines that the analyte is not detected in the feedstream. [40 CFR 63.1207(m)(3)]
 - (3) The permittee must state in the site-specific test plan that the permittee submits for review and approval under 40 CFR 63.1207(e) that the permittee intends to comply with the provisions of 40 CFR 63.1207(m). The permittee must include in the test

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plan documentation that any surrogate that is proposed for gas flowrate adequately correlates with the gas flowrate. [40 CFR 63.1207(m)(5)]

- n. See **6. Specific Reporting Requirements** for notifications, extension requests, and other reporting requirements relating to comprehensive performance tests and confirmatory performance tests under 40 CFR 63, Subpart EEE.
- o. In the event of a failure to meet an emission standard during a comprehensive or confirmatory performance test, see **1. Operating Limitations** x.
- p. The permittee shall conduct an initial performance test concurrently with the initial comprehensive performance test required by **3. Testing Requirements** d. to demonstrate initial compliance with 401 KAR 59:020 as follows: [401 KAR 52:020, Section 10]
 - (1) The reference methods as defined in Appendix A of 40 CFR 60, filed by reference in 401 KAR 50:015, except as provided for in 401 KAR 50:045, shall be used to determine compliance with the standards prescribed in 401 KAR 59:020, Section 3 as follows: [401 KAR 59:020, Section 6(1)]
 - (i) Reference Method 5 for the concentration of particulate matter and the associated moisture content; [401 KAR 59:020, Section 6(1)(a)]
 - (A) Consistent with 40 CFR 63.1208(b)(8), the permittee may instead use EPA Method 5I of appendix A-3 to 40 CFR part 60, if appropriate. [401 KAR 52:020, Section 10 and 401 KAR 50:045, Section 4(3)(b)]
 - (ii) Reference Method 1 for sample and velocity traverses; [401 KAR 59:020, Section 6(1)(b)]
 - (iii) Reference Method 2 for velocity and volumetric flow rate; [401 KAR 59:020, Section 6(1)(c)]
 - (iv) Reference Method 3 for gas analysis and calculation of excess air, using the integrated sample technique; and [401 KAR 59:020, Section 6(1)(d)]
 - (2) The sampling time for each run shall be at least sixty (60) minutes and the minimum sample volume shall be 0.85 dscm (thirty (30.0) dscf) except that smaller sampling times or sample volumes, when necessitated by process variables or other factors (such as the requirements of 40 CFR 63, Subpart EEE), may be approved by the cabinet. [401 KAR 59:020, Section 6(2)]
 - (3) The permittee shall determine C_{12} according to the following equation based on the averages of each run: [401 KAR 59:020, Appendix C]

$$C_{12} = \frac{12 \times C_p}{\%CO_2}$$

Where: C_{12} = concentration of particulate matter corrected to twelve (12) percent carbon dioxide
 C_p = concentration of particulate matter, and
 $\%CO_2$ = percentage of measured carbon dioxide

- q. The permittee shall conduct performance tests to establish an uncontrolled emission factor for NO_x, control efficiency of the SCR, uncontrolled emission factor for SO_x, control efficiency of the DSI system, and minimum sorbent feedrate: [401 KAR 52:020, Section 10]

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

- (1) *Test Date.*
 - (i) The permittee shall conduct an initial performance test concurrently with the initial comprehensive performance test required by **3. Testing Requirements d.**
 - (ii) The permittee shall conduct subsequent tests concurrently with any subsequent comprehensive performance performed pursuant to 40 CFR 63, Subpart EEE.
 - (iii) For initial and subsequent performance tests, the permittee may elect to conduct the NO_x/SO_x performance test separately, provided the permittee conducts the performance test no later than 30 days following completion of the comprehensive performance test performed pursuant to 40 CFR 63, Subpart EEE.
- (2) *Operating conditions during testing.*
 - (i) During subsequent performance tests, current operating parameter limits for the DSI for the purpose of SO_x control are waived.
 - (ii) If the permittee elects to conduct the NO_x/SO_x performance test separately from a comprehensive performance test performed pursuant to 40 CFR 63, Subpart EEE, the permittee must comply with all operating parameter limits (OPLs) established during the comprehensive performance test immediately preceding the NO_x/SO_x performance test. Consistent with **Section G 5.b.**, the permittee must maintain a hazardous waste feedrate within 10% of the corresponding OPL established pursuant to 40 CFR 63, Subpart EEE.
 - (iii) Consistent with 40 CFR 63.1206(c)(1)(i), nothing in **3. Testing Requirements q(2)(i) or (ii)** above shall be construed as allowing the permittee to operate outside the applicable OPLs established in the Documentation of Compliance submitted pursuant to 40 CFR 63.1211(c) or, for subsequent tests, the applicable Notification of Compliance (see **5. Specific Recordkeeping Requirements b.** and **6. Specific Reporting Requirements f.**).
- (3) *Test methods.* The permittee shall use the following test methods or equivalents if approved by the Division.
 - (i) Method 1 or 1A of appendix A-1 to 40 CFR part 60, as appropriate, for selection of the sampling sites. Sample site #1, for determination of uncontrolled SO_x emission rate, shall be prior to sorbent injection. Sample site #2, for determination of uncontrolled NO_x emission rate and SO_x control efficiency, shall be after the baghouse and HEPA filter and prior to ammonia injection. Sampling site #2 may be prior to the SCR preheat burner chamber if sampling between the preheat burner chamber and ammonia injection is impracticable. Sampling site #3, for determination of NO_x control efficiency, shall be after the SCR.
 - (ii) Method 2, 2A, 2C, or 2D of appendix A-1 to 40 CFR part 60, as appropriate, for determination of the gas volumetric flow rates at each sampling site.
 - (iii) Method 7E of appendix A-4 to 40 CFR part 60 for determination of NO_x emissions at sampling sites #2 and #3, or an equivalent method subject to approval by the Division.
 - (iv) Method 6C and Method 8 of appendix A-4 to 40 CFR part 60 for determination of SO₂ and SO₃ emissions at sampling sites #1 and #2.
- (4) *Test protocol requirements.* The permittee shall submit a test protocol in accordance with the requirements of **Section G 5.a.** The test protocol may reference specific portions of the performance test plan required by **3. Testing Requirements j.** as

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necessary. In addition, the permittee must include the following information in the test protocol:

- (i) Indication of whether the permittee is electing to test concurrently with the initial comprehensive performance test or within 30 days of completion of the initial comprehensive performance test.
 - (ii) A detailed description of sampling and monitoring procedures including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis;
 - (iii) A description of, and planned operating conditions for, any emission control equipment that will be used for control of NO_x or SO_x;
 - (A) For SO_x, the permittee must specify the brand (i.e., manufacturer) and type of sorbent used during the test, or document in the performance test plan key parameters that affect adsorption (of SO₂ and SO₃) and identify limits on those parameters based on the sorbent to be used in the performance test.
 - (B) This requirement may be satisfied for NO_x by referencing the SCR control plan required by **6. Specific Reporting Requirements** r.
 - (iv) Temperature measurement locations;
 - (v) Such other information as the Division reasonably finds necessary and requests to determine whether to approve the performance test protocol.
- (5) *Test report requirements.* Results of a performance test shall include the analysis of samples, determination of emissions, and raw data. A performance test is “completed” when field sample collection is terminated. For the purpose of this performance test report, **Section G. 5.c.** does not apply. Instead, the test report must be submitted no later than the submission date of the Notification of Compliance required under 40 CFR 63, Subpart EEE, regardless of the permittee’s election to test concurrently with the comprehensive performance test. See **6. Specific Reporting Requirements** e(1)(iii). The following information must be included in the test report:
- (i) For NO_x:
 - (A) The mass emission rates of NO_x (E_i, E_o) must be computed using the following equations:

$$E_i = K_2 \left(\sum_{j=1}^n C_{ij} M_j \right) Q_i$$

$$E_o = K_2 \left(\sum_{j=1}^n C_{oj} M_j \right) Q_o$$

Where:

- E_i = Mass rate of NO_x at sampling site #1, lb/hr
- E_o = Mass rate of NO_x discharged to the atmosphere, lb/hr
- C_{ij}, C_{oj} = Concentration of sample component “j” (NO or NO₂) of the gas stream at sampling site #1 or #2, respectively, dry basis, ppm by volume.

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M_j, M_j = Molecular weight of sample component “j” of the gas stream, lb/lb-mole.

Q_i, Q_o = Flow rate of gas stream at the inlet and outlet of the SCR, respectively, dscf/min.

K_2 = 1.557×10^{-7} (1/ppm) (lb-mole/scf) (min/hr) (English units), where standard temperature for (lb-mole/scf) is 68 °F.

(B) The emission reduction (R) of NO_x must be determined using the following equation:

$$R = \frac{E_i - E_o}{E_i} \times 100$$

(C) An emission factor for NO_x (EF) must be determined using the following equation:

$$EF = \frac{E_i}{P}$$

Where:

P = Hazardous waste feedrate, tons/hr

(D) Documentation necessary to demonstrate testing was performed at conditions that are representative of the source's operations.

(E) Monitoring data for parameters monitored in accordance with the SCR Operating Plan required by **6. Specific Reporting Requirements** r.

(ii) For SO_x :

(A) The mass emission rate of SO_x (E) must be computed for sampling sites #1 and #2 using the following equations:

$$C_{\text{SO}_3} = C_{\text{H}_2\text{SO}_4} \times 80.06/98.08$$

$$E_{\text{SO}_x} = K \times (C_{\text{SO}_3} + C_{\text{SO}_2}) \times Q$$

Where:

C_{SO_3} = Sulfur trioxide concentration, lb/dscf

$C_{\text{H}_2\text{SO}_4}$ = Sulfuric acid (including SO_3) concentration determined according to Section 12 of Method 8, lb/dscf

C_{SO_2} = Sulfur dioxide concentration determined according to Method 6C or Method 8, whichever is greater, lb/dscf

80.06 = Constant, MW of SO_3 , lb/lb-mole

98.08 = Constant, MW of H_2SO_4 , lb/lb-mole

E_{SO_x} = Mass emission rate of SO_x , lb/hr

Q = Flow rate of gas stream at the sampling site #1, dscf/min.

K = 1.557×10^{-7} (1/ppm) (lb-mole/scf) (min/hr) (English units), where standard temperature for (lb-mole/scf) is 68 °F.

(B) An emission factor for SO_x (EF) must be determined using the following equation:

$$EF = \frac{E_{i,\text{SO}_x}}{P}$$

Where:

P = Hazardous waste feedrate, tons/hr

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E_{i,SO_x} = Mass emission rate of SO_x at sampling site #1, lb/hr

(C) The emission reduction (R) of SO_x must be determined using the following equation:

$$R = \frac{E_{i,SO_x} - E_{o,SO_x}}{E_{i,SO_x}} \times 100$$

Where:

E_{o,SO_x} = Mass emission rate of SO_x at sampling site #2, lb/hr

(D) Sorbent feedrate during each test run. If the permittee elects to conduct the NO_x/SO_x performance test separately from a comprehensive performance test, the permittee must establish a limit on minimum sorbent feedrate as the average of the test run averages.

(iii) If the permittee elects to conduct a NO_x/SO_x performance test separately from a comprehensive performance test performed pursuant to 40 CFR 63, Subpart EEE, the permittee shall identify whether any OPLs established during the comprehensive performance test immediately preceding the NO_x/SO_x performance test and documented in the corresponding Notification of Compliance conflicted with the OPLs established in the Documentation of Compliance, or for subsequent tests, the previously applicable Notification of Compliance. If any such OPLs are identified, the permittee shall provide an explanation as to whether complying with the OPLs established by the Notification of Compliance will significantly adversely affect NO_x or SO_x emissions.

(iv) Also include the information specified in **6. Specific Reporting Requirements** g(2)(i) through (vi).

r. Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

a. *Continuous emissions monitoring systems (CEMS).* [40 CFR 63.1209(a)]

(1) The permittee must use a carbon monoxide CEMS to demonstrate and monitor compliance with the carbon monoxide and hydrocarbon standard under 40 CFR 63, Subpart EEE. The permittee must also use an oxygen CEMS to continuously correct the carbon monoxide level to 7 percent oxygen. [40 CFR 63.1209(a)(1)(i)]

(2) *Performance specifications.* The permittee must install, calibrate, maintain, and continuously operate the CEMS in compliance with the quality assurance procedures provided in Appendix A to 40 CFR 63, Subpart EEE, and Performance Specifications 4B (carbon monoxide and oxygen) of appendix B to 40 CFR part 60. [40 CFR 63.1209(a)(2)]

(3) *Carbon monoxide readings exceeding the span.* [40 CFR 63.1209(a)(3)]

(i) Except as provided by 40 CFR 63.1209(a)(3)(ii), if a carbon monoxide CEMS detects a response that results in a one-minute average at or above the 3,000 ppmv span level required by Performance Specification 4B of appendix B to 40 CFR part 60, the one-minute average must be recorded as 10,000 ppmv. The one-

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minute 10,000 ppmv value must be used for calculating the hourly rolling average carbon monoxide level. [40 CFR 63.1209(a)(3)(i)]

- (ii) Carbon monoxide CEMS that use a span value of 10,000 ppmv when one-minute carbon monoxide levels are equal to or exceed 3,000 ppmv are not subject to 40 CFR 63.1209(a)(3)(i). Carbon monoxide CEMS that use a span value of 10,000 are subject to the same CEMS performance and equipment specifications when operating in the range of 3,000 ppmv to 10,000 ppmv that are provided by Performance Specification 4B of appendix B to 40 CFR part 60 for other carbon monoxide CEMS, except: [40 CFR 63.1209(a)(3)(ii)]

- (A) Calibration drift must be less than 300 ppmv; and [40 CFR 63.1209(a)(3)(ii)(A)]

- (B) Calibration error must be less than 500 ppmv. [40 CFR 63.1209(a)(3)(ii)(B)]

(4) *Calculation of rolling averages* – [40 CFR 63.1209(a)(6)]

- (i) *Calculation of rolling averages initially.* The carbon monoxide CEMS must begin recording one-minute average values by 12:01 a.m. and hourly rolling average values by 1:01 a.m., when 60 one-minute values will be available for calculating the initial hourly rolling average for those sources that come into compliance on the regulatory compliance date. Sources that elect to come into compliance before the regulatory compliance date must begin recording one-minute and hourly rolling average values within 60 seconds and 60 minutes (when 60 one-minute values will be available for calculating the initial hourly rolling average), respectively, from the time at which compliance begins. [40 CFR 63.1209(a)(6)(i)]

- (ii) *Calculation of rolling averages upon intermittent operations.* The permittee must ignore periods of time when one-minute values are not available for calculating the hourly rolling average. When one-minute values become available again, the first one-minute value is added to the previous 59 values to calculate the hourly rolling average. [40 CFR 63.1209(a)(6)(ii)]

- (iii) *Calculation of rolling averages when the hazardous waste feed is cutoff.* [40 CFR 63.1209(a)(6)(iii)]

- (A) Except as provided by 40 CFR 63.1209(a)(6)(iii)(B), the permittee must continue monitoring carbon monoxide when the hazardous waste feed is cutoff if the source is operating. The permittee must not resume feeding hazardous waste if the emission levels exceed the standard. [40 CFR 63.1209(a)(6)(iii)(A)]

- (B) The permittee is not subject to the CEMS requirements of 40 CFR 63, Subpart EEE during periods of time the permittee meets the requirements of 40 CFR 63.1206(b)(1)(ii) (compliance with emissions standards for nonhazardous waste burning sources when the permittee is not burning hazardous waste). [40 CFR 63.1209(a)(6)(iii)(B)]

- b. The permittee shall monitor the following parameters in accordance with the requirements of **4. Specific Monitoring Requirements** c. through h. for compliance with the operating parameter limits (OPLs) of 40 CFR 63.1219: [40 CFR 63.1219]

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- (1) *Combustion chamber temperature.* The permittee must measure the temperature of each combustion chamber at a location that best represents, as practicable, the bulk gas temperature in the combustion zone. The permittee must document the temperature measurement location in the test plan the permittee submits under 40 CFR 63.1207(e). [40 CFR 63.1209(j)(1)(i) and (k)(2)]
- (2) *Flue gas flowrate or production rate.* The permittee must establish and monitor an indicator of gas residence time in the control device: flue gas flowrate, production rate, or another parameter that the permittee documents in the site-specific test plan as an appropriate surrogate for gas residence time. [40 CFR 63.1209(j)(2)(i), (k)(3), (m)(2), (n)(5), and (o)(2)]
- (3) *Hazardous waste feedrate.* The permittee must monitor pumpable and total (*i.e.*, pumpable and nonpumpable) hazardous waste feedrate for each location where hazardous waste is fed. [40 CFR 63.1209(j)(3)(i) and (k)(4)]
- (4) *Waste firing system.* The permittee must specify operating parameters to ensure that good operation of each hazardous waste firing system is maintained. [40 CFR 63.1209(j)(4)]
 - (i) The permittee has specified, and must monitor, waste atomization pressure. [401 KAR 52:020, Section 10]
- (5) *Gas temperature at the inlet to a dry particulate matter control device.* The permittee must monitor the temperature of the gas at the inlet to each baghouse (fabric filter) or other dry emissions control device where particulate matter is suspended in contact with combustion gas. [40 CFR 63.1209(k)(1)]
- (6) *Feedrate of mercury.* The permittee must monitor the total feedrate of mercury in all feedstreams. [40 CFR 63.1209(l)(1)(i)]
- (7) *Control device operating parameters for other particulate matter control devices.* The permittee must install, calibrate, operate, and maintain a monitoring device equipped with a recorder to measure the values for each operating parameter selected in accordance with the requirements of 40 CFR 63.1209(m)(1)(iv)(A)(1). The permittee must install, calibrate, and maintain the monitoring equipment in accordance with the equipment manufacturer's specifications. The recorder must record the detector responses at least every 60 seconds, as required in the definition of continuous monitor. [40 CFR 63.1209(m)(1)(iv)(B)]
- (8) *Ash feedrate.* The permittee must monitor the ash feedrate. This requirement is waived, however, if the permittee complies with the particulate matter detection system requirements under 40 CFR 63.1206(c)(9). [40 CFR 63.1209(m)(3)]
- (9) *Feedrate of semivolatile and low volatile metals.* The permittee must monitor the feedrate of semivolatile metals (cadmium and lead) and low volatile metals (arsenic, beryllium, and chromium). [40 CFR 63.1209(n)(2)(i)]
- (10) *Total chlorine and chloride feedrate.* The permittee must monitor the feedrate of total chlorine and chloride in all feedstreams. [40 CFR 63.1209(n)(4) and (o)(1)]
- (11) For the Dry Sorbent Injection (DSI) system:
 - (i) *Sorbent feedrate.* The permittee must monitor sorbent feedrate. [40 CFR 63.1209(o)(4)(i)]
 - (ii) *Carrier fluid flowrate or nozzle pressure drop.* The permittee must monitor carrier fluid (gas or liquid) flowrate or nozzle pressure drop. [40 CFR 63.1209(o)(4)(ii)]

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- c. *Other continuous monitoring systems (CMS)*. [40 CFR 63.1209(b)]
- (1) The permittee must use CMS (e.g., thermocouples, pressure transducers, flow meters) to document compliance with the applicable operating parameter limits under 40 CFR 63.1209. [40 CFR 63.1209(b)(1)]
 - (2) Except as specified in 40 CFR 63.1209(b)(2)(i) and (ii), the permittee must install and operate continuous monitoring systems other than CEMS in conformance with 40 CFR 63.8(c)(3) that requires the permittee, at a minimum, to comply with the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system: [40 CFR 63.1209(b)(2)]
 - (i) *Calibration of thermocouples and pyrometers*. The calibration of thermocouples must be verified at a frequency and in a manner consistent with manufacturer specifications, but no less frequent than once per year. The permittee must operate and maintain optical pyrometers in accordance with manufacturer specifications unless otherwise approved by the Administrator. The permittee must calibrate optical pyrometers in accordance with the frequency and procedures recommended by the manufacturer, but no less frequent than once per year, unless otherwise approved by the Administrator. [40 CFR 63.1209(b)(2)(i)]
 - (3) CMS must sample the regulated parameter without interruption, and evaluate the detector response at least once each 15 seconds, and compute and record the average values at least every 60 seconds. [40 CFR 63.1209(b)(3)]
 - (4) The span of the non-CEMS CMS detector must not be exceeded. The permittee must interlock the span limits into the automatic waste feed cutoff system required by 40 CFR 63.1206(c)(3). [40 CFR 63.1209(b)(4)]
 - (5) *Calculation of rolling averages* – [40 CFR 63.1209(b)(5)]
 - (i) *Calculation of rolling averages initially*. Continuous monitoring systems must begin recording one-minute average values by 12:01 a.m., hourly rolling average values by 1:01 a.m. (e.g., when 60 one-minute values will be available for calculating the initial hourly rolling average), and twelve-hour rolling averages by 12:01 p.m. (e.g., when 720 one-minute averages are available to calculate a 12-hour rolling average), for those sources that come into compliance on the regulatory compliance date. Sources that elect to come into compliance before the regulatory compliance date must begin recording one-minute, hourly rolling average, and 12-hour rolling average values within 60 seconds, 60 minutes (when 60 one-minute values will be available for calculating the initial hourly rolling average), and 720 minutes (when 720 one-minute values will be available for calculating the initial 12-hour hourly rolling average) respectively, from the time at which compliance begins. [40 CFR 63.1209(b)(5)(i)]
 - (ii) *Calculation of rolling averages upon intermittent operations*. The permittee must ignore periods of time when one-minute values are not available for calculating rolling averages. When one-minute values become available again, the first one-minute value is added to the previous one-minute values to calculate rolling averages. [40 CFR 63.1209(b)(5)(ii)]
 - (iii) *Calculation of rolling averages when the hazardous waste feed is cutoff*. [40 CFR 63.1209(b)(5)(iii)]
 - (A) Except as provided by 40 CFR 63.1209(b)(5)(iii)(B), the permittee must continue monitoring operating parameter limits with a CMS when the

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hazardous waste feed is cutoff if the source is operating. The permittee must not resume feeding hazardous waste if an operating parameter exceeds its limit. [40 CFR 63.1209(b)(5)(iii)(A)]

- d. *Analysis of feedstreams* – [40 CFR 63.1209(c)]
- (1) *Compliance with feedrate limits.* To comply with the applicable feedrate limits of 40 CFR 63.1209, the permittee must monitor and record feedrates as follows: [40 CFR 63.1209(c)(4)]
 - (i) Determine and record the value of the parameter for each feedstream by sampling and analysis or other method; [40 CFR 63.1209(c)(4)(i)]
 - (ii) Determine and record the mass or volume flowrate of each feedstream by a CMS. If the permittee determine flowrate of a feedstream by volume, the permittee must determine and record the density of the feedstream by sampling and analysis (unless the permittee reports the constituent concentration in units of weight per unit volume (e.g., mg/l)); and [40 CFR 63.1209(c)(4)(ii)]
 - (iii) Calculate and record the mass feedrate of the parameter per unit time. [40 CFR 63.1209(c)(4)(iii)]
 - (2) *Waiver of monitoring of constituents in certain feedstreams.* The permittee is not required to monitor levels of metals, chlorine, or fluorine in the following feedstreams to document compliance with the feedrate limits or work practice standards under 40 CFR 63.1209 provided that the permittee documents in the comprehensive performance test plan the expected levels of the constituent in the feedstream and account for those assumed feedrate levels in documenting compliance with feedrate limits or work practice standards: natural gas, process air, and feedstreams from vapor recovery systems. [40 CFR 63.1209(c)(5)]
- e. *Performance evaluations.* [40 CFR 63.1209(d)]
- (1) The requirements of 40 CFR 63.8(d) (Quality control program) and 40 CFR 63.8(e) (Performance evaluation of continuous monitoring systems) apply, except that the permittee must conduct performance evaluations of components of the CMS under the frequency and procedures (for example, submittal of performance evaluation test plan for review and approval) applicable to performance tests as provided by 40 CFR 63.1207. [40 CFR 63.1209(d)(1)]
 - (2) The permittee must comply with the quality assurance procedures for CEMS prescribed in appendix A to 40 CFR 63, Subpart EEE. [40 CFR 63.1209(d)(2)]
- f. *Conduct of monitoring.* The provisions of 40 CFR 63.8(b) apply. [40 CFR 63.1209(e)]
- g. *Operation and maintenance of continuous monitoring systems.* The provisions of 40 CFR 63.8(c) apply except: [40 CFR 63.1209(f)]
- (1) *Section 63.8(c)(3).* The requirements of 40 CFR 63.1211(c), that require CMS to be installed, calibrated, and operational on the compliance date, shall be complied with instead of 40 CFR 63.8(c)(3); [40 CFR 63.1209(f)(1)]
 - (2) *Section 63.8(c)(4)(ii).* The performance specifications for carbon monoxide, hydrocarbon, and oxygen CEMS in appendix B to 40 CFR part 60 that require detectors to measure the sample concentration at least once every 15 seconds for

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- calculating an average emission rate once every 60 seconds shall be complied with instead of 40 CFR 63.8(c)(4)(ii); and [40 CFR 63.1209(f)(2)]
- h. *Reduction of monitoring data.* The provisions of 40 CFR 63.8(g) apply. [40 CFR 63.1209(h)]
- (1) The permittee of each CMS must reduce the monitoring data as specified in 40 CFR 63.8(g)(1) through (5). [40 CFR 63.8(g)(1)]
 - (2) Data from CEMS for measurement other than opacity, unless otherwise specified in the relevant standard, shall be reduced to 1-hour averages computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities pursuant to provisions of 40 CFR part 63 are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing a 15-minute period. Alternatively, an arithmetic or integrated 1-hour average of CEMS data may be used. Time periods for averaging are defined in 40 CFR 63.2. [40 CFR 63.8(g)(2)]
 - (3) The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O₂ or ng/J of pollutant). [40 CFR 63.8(g)(3)]
 - (4) All emission data shall be converted into units of the relevant standard for reporting purposes using the conversion procedures specified in 40 CFR 63, Subpart EEE. After conversion into units of the relevant standard, the data may be rounded to the same number of significant digits as used in that standard to specify the emission limit (e.g., rounded to the nearest 1 percent opacity). [40 CFR 63.8(g)(4)]
 - (5) Monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments must not be included in any data average computed under 40 CFR part 63. For the permittee complying with the requirements of 40 CFR 63.10(b)(2)(vii)(A) or (B), data averages must include any data recorded during periods of monitor breakdown or malfunction. [40 CFR 63.8(g)(5)]
- i. To document compliance with the performance test waiver provisions of 40 CFR 63.1207(m)(1), the permittee must: [40 CFR 63.1207(m)(1)(ii)]
- (1) Monitor and record the feedrate of mercury, semivolatile metals, low volatile metals, total fluorine and fluoride, and total chlorine and chloride from all feedstreams according to 40 CFR 63.1209(c). [40 CFR 63.1207(m)(1)(ii)(A)]
 - (2) Monitor with a CMS and record in the operating record the gas flowrate (either directly or by monitoring a surrogate parameter that the permittee has correlated to gas flowrate); [40 CFR 63.1207(m)(1)(ii)(B)]
 - (3) Continuously calculate and record in the operating record the MTEC under the procedures of 40 CFR 63.1207(m)(1)(i); and [40 CFR 63.1207(m)(1)(ii)(C)]
 - (4) See **1. Operating Limitations** y.(2). [40 CFR 63.1207(m)(1)(ii)(D)]
- j. The permittee shall monitor natural gas combusted (MMscf) in the primary burner and SCR burner during startup, shutdown, and malfunctions. [401 KAR 52:020, Section 10]
- k. The permittee shall monitor the flue gas flowrate to calculate emissions of CO in lb/hr. [401 KAR 52:020, Section 10]

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

1. The permittee shall monitor the operation of the SCR system in accordance with the SCR Operation Plan required by **6. Specific Reporting Requirements** r. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. *Summary of recordkeeping requirements.* The permittee must retain the following in the operating record: [40 CFR 63.1211(b)]
 - (1) *General.* Information required to document and maintain compliance with the regulations of 40 CFR 63, Subpart EEE, including data recorded by continuous monitoring systems (CMS), and copies of all notifications, reports, plans, and other documents submitted to the Administrator. [40 CFR 63.1200 and 40 CFR 63.10(b) and (c)]
 - (2) If the permittee elects to comply with all applicable requirements and standards promulgated under authority of the Clean Air Act, including sections 112 and 129, in lieu of the requirements of 40 CFR 63, Subpart EEE when not burning hazardous waste, the permittee must document in the operating record that the permittee is in compliance with those requirements. [40 CFR 63.1206(b)(1)(ii)].
 - (3) Documentation that a change will not adversely affect compliance with the emission standards or operating requirements of 40 CFR 63, Subpart EEE upon making such change. See **1. Operating Limitations** b.(2) and (3). [40 CFR 63.1206(b)(5)(ii)]
 - (4) Calculation of the hazardous waste residence time. See **5. Specific Recordkeeping Requirements** e. [40 CFR 63.1206(b)(11)]
 - (5) The Startup, Shutdown, and Malfunction Plan required by **1. Operating Limitations** d. [40 CFR 63.1206(c)(2)(iv)]
 - (6) Documentation of the permittee's investigation and evaluation of excessive exceedances during malfunctions. See **1. Operating Limitations** d.(5)(i)(C). [40 CFR 63.1206(c)(2)(v)(A)]
 - (7) Corrective measures for any automatic waste feed cutoff that results in an exceedance of an emission standard or operating parameter limit. See **1. Operating Limitations** g(5). [40 CFR 63.1206(c)(3)(v)]
 - (8) Documentation and results of the automatic waste feed cutoff operability testing. See **1. Operating Limitations** g(7). [40 CFR 63.1206(c)(3)(vii)]
 - (9) Corrective measures for any automatic waste feed cutoff that results in an exceedance of an emission standard or operating permit limit. See **1. Operating Limitations** **Error! Reference source not found..** [40 CFR 63.1206(c)(4)(iii)]
 - (10) Method used for control of combustion system leaks. See **1. Operating Limitations** h(2). [40 CFR 63.1206(c)(5)(ii)]
 - (11) Operator training and certification program. See **1. Operating Limitations** i. [40 CFR 63.1206(c)(6)]
 - (12) Operation and maintenance plan. See **1. Operating Limitations** j. [40 CFR 63.1206(c)(7)(i)(D)]
 - (13) Feedstream analysis plan. See **5. Specific Recordkeeping Requirements** d(1). [40 CFR 63.1209(c)(2)]
 - (14) Documentation that a substitute dry scrubber sorbent will provide the same level of control as the original material. See **1. Operating Limitations** u(3)(iii)(B). [40 CFR 63.1209(o)(4)(iii)(B)]

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

- (15) Documentation of compliance. See **5. Specific Recordkeeping Requirements** b. [40 CFR 63.1211(c)]
- (16) Documentation of startups, shutdowns, malfunctions, and failures to meet applicable standards. See **5. Specific Recordkeeping Requirements** c. [40 CFR 63.1211(e)]
- (17) If applicable to document compliance with 40 CFR 63.1207(m)(1):
 - (i) The gas flowrate (either directly or by monitoring a surrogate parameter that the permittee has correlated to gas flowrate). See **4. Specific Monitoring Requirements** i(2); [40 CFR 63.1207(m)(1)(ii)(B)]
 - (ii) Continuously calculate and record the MTEC under the procedures of 40 CFR 63.1207(m)(1)(i). See **3. Testing Requirements** m.(1)(i). [40 CFR 63.1207(m)(1)(ii)(C)]
 - (A) Unless the permittee complies with 40 CFR 63.1207(m)(1)(iii)(A) and (B).
- b. *Documentation of compliance.* [40 CFR 63.1211(c)]
 - (1) By the date the source starts operation, the permittee must develop and include in the operating record a Documentation of Compliance. [40 CFR 63.1211(c)(1)]
 - (2) The Documentation of Compliance must identify the applicable emission standards under 40 CFR 63, Subpart EEE and the limits on the operating parameters under 40 CFR 63.1209 that will ensure compliance with those emission standards. [40 CFR 63.1211(c)(2)]
 - (3) The permittee must include a signed and dated certification in the Documentation of Compliance that: [40 CFR 63.1211(c)(3)]
 - (i) Required CEMs and CMS are installed, calibrated, and continuously operating in compliance with the requirements of 40 CFR 63, Subpart EEE; and [40 CFR 63.1211(c)(3)(i)]
 - (ii) Based on an engineering evaluation prepared under the permittee's direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information and supporting documentation, and considering at a minimum the design, operation, and maintenance characteristics of the combustor and emissions control equipment, the types, quantities, and characteristics of feedstreams, and available emissions data: [40 CFR 63.1211(c)(3)(ii)]
 - (A) The permittee is in compliance with the emissions standards of 40 CFR 63, Subpart EEE; and [40 CFR 63.1211(c)(3)(ii)(A)]
 - (B) The limits on the operating parameters under 40 CFR 63.1209 ensure compliance with the emission standards of 40 CFR 63, Subpart EEE. [40 CFR 63.1211(c)(3)(ii)(B)]
 - (4) The permittee must comply with the emission standards and operating parameter limits specified in the Documentation of Compliance. [40 CFR 63.1211(c)(4)]
- c. *Other recordkeeping.* The permittee must retain the following in the operating record: [40 CFR 63.1211(e)]
 - (1) The start date, start time, and duration (hours) of each startup, shutdown, or malfunction of process, air pollution control, and monitoring equipment and whether the startup, shutdown, and malfunction plan was followed. [40 CFR 63.1211(e)(1)]

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

- (2) For periods of startup, shutdown, and malfunction when the startup, shutdown, and malfunction plan was not followed, record and retain a list of the affected sources or equipment; actions taken to minimize emissions in accordance with 40 CFR 63.6(e)(1)(i) and 40 CFR 63.8(c)(1)(i); any corrective actions taken to return the affected unit to its normal or usual manner of operation; whether the failure occurred during a period of startup, shutdown or malfunction; an estimate of the quantity of each regulated pollutant emitted; and a description of the method used to estimate the emissions. [40 CFR 63.1211(e)(2)]
- d. Analysis of feedstreams – [40 CFR 63.1209(c)]
- (1) *Feedstream analysis plan.* The permittee must develop and implement a feedstream analysis plan and record it in the operating record. The plan must specify at a minimum: [40 CFR 63.1209(c)(2)]
- (i) The parameters for which the permittee will analyze each feedstream to ensure compliance with the operating parameter limits of 40 CFR 63.1209; [40 CFR 63.1209(c)(2)(i)]
- (ii) Whether the permittee will obtain the analysis by performing sampling and analysis or by other methods, such as using analytical information obtained from others or using other published or documented data or information; [40 CFR 63.1209(c)(2)(ii)]
- (iii) How the permittee will use the analysis to document compliance with applicable feedrate limits (e.g., if the permittee blends hazardous wastes and obtain analyses of the wastes prior to blending but not of the blended, as-fired, waste, the plan must describe how the permittee will determine the pertinent parameters of the blended waste); [40 CFR 63.1209(c)(2)(iii)]
- (iv) The test methods which the permittee will use to obtain the analyses; [40 CFR 63.1209(c)(2)(iv)]
- (v) The sampling method which the permittee will use to obtain a representative sample of each feedstream to be analyzed using sampling methods described in appendix IX to 40 CFR part 266, or an equivalent method; and [40 CFR 63.1209(c)(2)(v)]
- (vi) The frequency with which the permittee will review or repeat the initial analysis of the feedstream to ensure that the analysis is accurate and up to date. [40 CFR 63.1209(c)(2)(vi)]
- (2) *Review and approval of analysis plan.* The permittee must submit the feedstream analysis plan to the Administrator for review and approval, if requested. [40 CFR 63.1209(c)(3)]
- (3) *Compliance with feedrate limits.* To comply with the applicable feedrate limits of 40 CFR 63.1209, the permittee must record feedrates as specified in 40 CFR 63.1209(c)(4)(i) through (iii) (see **4. Specific Monitoring Requirements d.(1)(i).** [40 CFR 63.1209(c)(4)]
- e. *Calculation of hazardous waste residence time.* The permittee must calculate the hazardous waste residence time and include the calculation in the performance test plan under 40 CFR 63.1207(f) and the operating record. The permittee must also provide the hazardous waste residence time in the Documentation of Compliance under 40 CFR

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

63.1211(c) and the Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(d). [40 CFR 63.1206(b)(11)]

- f. The incinerator shall have a nameplate installed in a conspicuous place on the unit giving the manufacturer's name, model number, rated capacity, and the types of waste material for which the unit is designed. [401 KAR 59:020 Section 5]
- g. The permittee must maintain records of natural gas combusted (MMscf) in the primary burner and SCR burner during startup, shutdown, and malfunctions on a monthly basis. [401 KAR 52:020, Section 10]
- h. If the permittee substitutes the brand or type of sorbent for the DSI system, the permittee must record documentation the substitute sorbent will provide the same level of control as the original sorbent. [401 KAR 52:020, Section 10]
- i. The permittee must maintain records of the SCR Operating Plan required by **6. Specific Reporting Requirements** r., any modifications made to the plan as a part of the review process, and any modifications made to the plan pursuant to **6. Specific Reporting Requirements** r(3). [401 KAR 52:020, Section 10]
- j. The permittee must maintain records of parameters monitored in accordance with the SCR Operating Plan required by **6. Specific Reporting Requirements** r. [401 KAR 52:020, Section 10]
- k. The permittee must maintain records of the flue gas flowrate, the concentration of CO as indicated by the CO CEMS, and CO emission rate on an hourly basis. [401 KAR 52:020, Section 10]
 - (1) For time periods in which CO CEMS or flue gas flowrate data is not available, the permittee must maintain the following records:
 - (i) Start and end time of data unavailability;
 - (ii) Reason(s) for data unavailability;
 - (iii) Corrective actions taken;
 - (iv) Hazardous waste feedrate, tons;
 - (v) Natural gas combusted in the SCR, MMscf
 - (vi) CO emissions calculated according to the corresponding emission factors listed in **Section D**.

6. Specific Reporting Requirements:

- a. *Summary of requirements.* [40 CFR 63.1210(a)]
 - (1) The permittee must submit the following notifications to the Administrator: [40 CFR 63.1210(a)(1)]
 - (i) Initial notifications that the permittee is subject to 40 CFR 63, Subpart EEE. [40 CFR 63.9(b)]
 - (ii) Notification that the permittee is subject to special compliance requirements. [40 CFR 63.9(d)]
 - (iii) Notification and documentation of any change in information already provided under 40 CFR 63.9. [40 CFR 63.9(j)]

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

- (iv) Notification of changes in design, operation, or maintenance. See **1. Operating Limitations** b(1)(i). [40 CFR 63.1206(b)(5)(i)]
- (v) Notification of excessive bag leak detection system exceedances. See **1. Operating Limitations** k(4). [40 CFR 63.1206(c)(8)(iv)]
- (vi) Notification of performance test and continuous monitoring system evaluation, including the performance test plan and CMS performance evaluation plan. See **6. Specific Reporting Requirements** l. The permittee may also be required on a case-by-case basis to submit a feedstream analysis plan under 40 CFR 63.1209(c)(3). See **4. Specific Monitoring Requirements** d. [40 CFR 63.1207(e), 40 CFR 63.9(e), and 40 CFR 63.9(g)(1) and (3)]
- (vii) Notification of compliance, including summary of results of performance tests and continuous monitoring system performance evaluations. See **6. Specific Reporting Requirements** b. through k. and **1. Operating Limitations** x. [40 CFR 63.1210(d), 40 CFR 63.1207(j), (k), and (l), and 40 CFR 63.9(h)]
- (viii) Notification of intent to comply. See **6. Specific Reporting Requirements** b. [40 CFR 63.1210(b)]
- (2) The permittee must submit the following notifications to the Administrator if the permittee requests or elects to comply with alternative requirements: [40 CFR 63.1210(a)(2)]
 - (i) The permittee may request an adjustment to time periods or postmark deadlines for submittal and review of required information. [40 CFR 63.9(i)]
 - (ii) The permittee may request to reduce the frequency of excess emissions and CMS performance reports. [40 CFR 63.10(e)(3)(ii)]
 - (iii) The permittee may request to waive recordkeeping or reporting requirements. [40 CFR 63.10(f)]
 - (iv) The permittee may request to burn hazardous waste for more than 720 hours and for purposes other than testing or pretesting after making a change in the design or operation that could affect compliance with emission standards and prior to submitting a revised Notification of Compliance. See **1. Operating Limitations** b(1)(iii)(B). [40 CFR 63.1206(b)(5)(i)(C)]
 - (v) The permittee may request to make changes to the startup, shutdown, and malfunction plan. See **1. Operating Limitations** d(2)(iii). [40 CFR 63.1206(c)(2)(ii)(C)]
 - (vi) The permittee may request an alternative means of control to provide control of combustion system leaks. See **1. Operating Limitations** h(1)(iii). [40 CFR 63.1206(c)(5)(i)(C)]
 - (vii) The permittee may request an alternative means of control to provide control of combustion system leaks. See **1. Operating Limitations** h(1)(iv). [40 CFR 63.1206(c)(5)(i)(D)]
 - (viii) The permittee may request more than 60 days to complete a performance test if additional time is needed for reasons beyond the permittee's control. See **6. Specific Reporting Requirements** e(3). [40 CFR 63.1207(d)(3)]
 - (ix) The permittee may request a time extension if the Administrator fails to approve or deny the permittee's test plan. See **3. Testing Requirements** l(2). [40 CFR 63.1207(e)(3) and 40 CFR 63.7(h)]

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

- (x) The permittee may request a reduced hazardous waste feedstream analysis for organic hazardous pollutants if the reduced analysis continues to be representative of organic hazardous pollutants in the permittee's hazardous waste feedstream. See **3. Testing Requirements** j(1)(ii)(D). [40 CFR 63.1207(f)(1)(ii)(D)]
 - (xi) The permittee may request to operate under a wider operating range for a parameter during confirmatory performance testing. See **3. Testing Requirements** k(2)(iv). [40 CFR 63.1207(g)(2)(v)]
 - (xii) The permittee may request up to a one-year time extension for conducting a performance test (other than the initial comprehensive performance test) to consolidate testing with other state or federally-required testing. See **6. Specific Reporting Requirements** m. [40 CFR 63.1207(i)]
 - (xiii) The permittee may request more than 90 days to submit a Notification of Compliance after completing a performance test if additional time is needed for reasons beyond the permittee's control. See **6. Specific Reporting Requirements** f(4). [40 CFR 63.1207(j)(4)]
 - (xiv) After failure of a performance test, the permittee may request to burn hazardous waste for more than 720 hours and for purposes other than testing or pretesting. See **6. Specific Reporting Requirements** k. [40 CFR 63.1207(l)(3)]
 - (xv) The permittee may request alternatives to operating parameter monitoring requirements, except for standards that the permittee must monitor with a continuous emission monitoring system (CEMS); and approval to use a CEMS in lieu of operating parameter limits. [40 CFR 63.1209(g)(1)]
 - (xvi) The permittee may request to extrapolate mercury feedrate limits. See **1. Operating Limitations** r(1)(ii). [40 CFR 63.1209(l)(1)]
 - (xvii) The permittee may request to extrapolate semivolatile and low volatile metal feedrate limits. See **1. Operating Limitations** t(2)(iv). [40 CFR 63.1209(n)(2)]
 - (xviii) The permittee may request to use data compression techniques to record data on a less frequent basis than required by 40 CFR 63.1209. See **6. Specific Reporting Requirements** o. [40 CFR 63.1211(d)]
- b. Any source that files a RCRA permit application or permit modification for request for construction of a hazardous waste combustion unit must: [40 CFR 63.1212(b)]
- (1) Prepare a draft NIC pursuant to 40 CFR 63.1210(b) and make it available to the public upon issuance of the notice of public meeting pursuant to 40 CFR 63.1210(c)(3); [40 CFR 63.1212(b)(1)]
 - (2) Prepare a draft comprehensive performance test plan pursuant to the requirements of 40 CFR 63.1207 and make it available for public review upon issuance of the notice of NIC public meeting; [40 CFR 63.1212(b)(2)]
 - (3) Provide notice to the public of a pre-application meeting pursuant to 40 CFR 124.31 or notice to the public of a permit modification request pursuant to 40 CFR 270.; [40 CFR 63.1212(b)(3)]
 - (4) Hold an informal public meeting [pursuant to 40 CFR 63.1210(c)(1) and (c)(2)] no earlier than 30 days following notice of the NIC public meeting and notice of the pre-application meeting or notice of the permit modification request to discuss anticipated activities described in the draft NIC and pre-application or permit modification

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

- request for achieving compliance with the emission standards of 40 CFR 63, Subpart EEE; and [40 CFR 63.1212(b)(4)]
- (5) Submit a final NIC pursuant to 40 CFR 63.1210(b)(3). [40 CFR 63.1212(b)(5)]
- c. *Notification of intent to comply (NIC)*. These procedures apply to sources that have not previously complied with the requirements of 40 CFR 63.1211(b) and (c). [40 CFR 63.1210(b)]
- (1) The permittee must prepare a Notification of Intent to Comply that includes all of the following information: [40 CFR 63.1210(b)(1)]
- (i) General information: [40 CFR 63.1210(b)(1)(i)]
- (A) The name and address of the owner/operator and the source; [40 CFR 63.1210(b)(1)(i)(A)]
- (B) Whether the source is a major or an area source; [40 CFR 63.1210(b)(1)(i)(B)]
- (C) Waste minimization and emission control technique(s) being considered; [40 CFR 63.1210(b)(1)(i)(C)]
- (D) Emission monitoring technique(s) the permittee is considering; [40 CFR 63.1210(b)(1)(i)(D)]
- (E) Waste minimization and emission control technique(s) effectiveness; [40 CFR 63.1210(b)(1)(i)(E)]
- (F) A description of the evaluation criteria used or to be used to select waste minimization and/or emission control technique(s); and [40 CFR 63.1210(b)(1)(i)(F)]
- (G) A general description of how the permittee intends to comply with the emission standards of 40 CFR 63, Subpart EEE. [40 CFR 63.1210(b)(1)(i)(G)]
- (ii) As applicable to the permittee's source, information on key activities and estimated dates for these activities that will bring the source into compliance with emission control requirements of 40 CFR 63, Subpart EEE. The permittee must include all of the following key activities and dates in their NIC: [40 CFR 63.1210(b)(1)(ii)]
- (A) The dates by which the permittee anticipates they will develop engineering designs for emission control systems or process changes for emissions; [40 CFR 63.1210(b)(1)(ii)(A)]
- (B) The date by which the permittee anticipates they will commit internal or external resources for installing emission control systems or making process changes for emission control, or the date by which the permittee will issue orders for the purchase of component parts to accomplish emission control or process changes. [40 CFR 63.1210(b)(1)(ii)(B)]
- (C) The date by which the permittee anticipates they will submit construction applications; [40 CFR 63.1210(b)(1)(ii)(C)]
- (D) The date by which the permittee anticipates they will initiate on-site construction, installation of emission control equipment, or process change; [40 CFR 63.1210(b)(1)(ii)(D)]
- (E) The date by which the permittee anticipates they will complete on-site construction, installation of emission control equipment, or process change; and [40 CFR 63.1210(b)(1)(ii)(E)]

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

- (F) The date by which the permittee anticipates they will achieve final compliance. The individual dates and milestones listed in 40 CFR 63.1210(b)(1)(ii)(A) through (F) as part of the NIC are not requirements and therefore are not enforceable deadlines; the requirements of 40 CFR 63.1210(b)(1)(ii)(A) through (F) must be included as part of the NIC only to inform the public of how the permittee intends to comply with the emission standards of 40 CFR 63, Subpart EEE. [40 CFR 63.1210(b)(1)(ii)(F)]
- (iii) A summary of the public meeting required under 40 CFR 63.1210(c). [40 CFR 63.1210(b)(1)(iii)]
- (iv) *Certification of intent to comply.* The Notice of Intent to Comply (NIC) must contain the following certification signed and dated by a responsible official as defined under 40 CFR 63.2: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. [40 CFR 63.1212(a)]
- (2) The permittee must make a draft of the NIC available for public review no later than 30 days prior to the public meeting required under 40 CFR 63.1210(c)(1). [40 CFR 63.1210(b)(2)]
- (3) The permittee must submit the final NIC to the Administrator: [40 CFR 63.1210(b)(3)]
 - (i) *New units.* No later than 60 days following the informal public meeting. Submit the final NIC as a portable document format (PDF) upload according to 40 CFR 63.1211(g). [40 CFR 63.1210(b)(3)(ii) and (iii)]
- d. *NIC public meeting and notice.* [40 CFR 63.1210(c)]
 - (1) Prior to the submission of the NIC to the permitting agency and no earlier than thirty (30) days following notice of the informal public meeting, the permittee must hold at least one informal meeting with the public to discuss the anticipated activities described in the draft NIC for achieving compliance with the emission standards of 40 CFR 63, Subpart EEE. The permittee must post a sign-in sheet or otherwise provide a voluntary opportunity for attendees to provide their names and addresses. [40 CFR 63.1210(c)(1)(ii)]
 - (2) The permittee must submit a summary of the meeting, along with the list of attendees and their addresses developed under 40 CFR 63.1210(c)(1), and copies of any written comments or materials submitted at the meeting, to the Administrator as part of the final NIC, in accordance with 40 CFR 63.1210(b)(1)(iii); [40 CFR 63.1210(c)(2)]
 - (3) The permittee must provide public notice of the NIC meeting at least 30 days prior to the meeting and the permittee must maintain, and provide to the Administrator upon request, documentation of the notice. The permittee must provide public notice in all of the following forms: [40 CFR 63.1210(c)(3)]
 - (i) *Newspaper advertisement.* The permittee must publish a notice in a newspaper of general circulation in the county of the facility. In addition, the permittee must publish the notice in newspapers of general circulation in adjacent counties or

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

- equivalent jurisdiction where such publication would be necessary to inform the affected public. The permittee must publish the notice as a display advertisement. [40 CFR 63.1210(c)(3)(i)]
- (ii) *Visible and accessible sign.* The permittee must post a notice on a clearly marked sign at or near the source. If the permittee places the sign on the site of the hazardous waste combustor, the sign must be large enough to be readable from the nearest spot where the public would pass by the site. [40 CFR 63.1210(c)(3)(ii)]
 - (iii) *Broadcast media announcement.* The permittee must broadcast a notice at least once on at least one local radio station or television station. [40 CFR 63.1210(c)(3)(iii)]
 - (iv) *Notice to the facility mailing list.* The permittee must provide a copy of the notice to the facility mailing list in accordance with 40 CFR 124.10(c)(1)(ix). [40 CFR 63.1210(c)(3)(iv)]
- (4) The permittee must include all of the following in the notices required under 40 CFR 63.1210(c)(3): [40 CFR 63.1210(c)(4)]
- (i) The date, time, and location of the meeting; [40 CFR 63.1210(c)(4)(i)]
 - (ii) A brief description of the purpose of the meeting; [40 CFR 63.1210(c)(4)(ii)]
 - (iii) A brief description of the source and proposed operations, including the address or a map (e.g., a sketched or copied street map) of the source location; [40 CFR 63.1210(c)(4)(iii)]
 - (iv) A statement encouraging people to contact the source at least 72 hours before the meeting if they need special access to participate in the meeting; [40 CFR 63.1210(c)(4)(iv)]
 - (v) A statement describing how the draft NIC (and final NIC, if requested) can be obtained; and [40 CFR 63.1210(c)(4)(v)]
 - (vi) The name, address, and telephone number of a contact person for the NIC. [40 CFR 63.1210(c)(4)(vi)]
- e. *Notification of compliance.* [40 CFR 63.1210(d)]
- (1) The Notification of Compliance status requirements of 40 CFR 63.9(h) apply, except that: [40 CFR 63.1210(d)(1)]
- (i) The notification is a Notification of Compliance, rather than compliance status; [40 CFR 63.1210(d)(1)(i)]
 - (ii) The notification is required for the initial comprehensive performance test and each subsequent comprehensive and confirmatory performance test; and [40 CFR 63.1210(d)(1)(ii)]
 - (iii) The permittee must postmark the notification before the close of business on the 90th day following completion of relevant compliance demonstration activity specified in 40 CFR 63, Subpart EEE rather than the 60th day as required by 40 CFR 63.9(h)(2)(ii). [40 CFR 63.1210(d)(1)(iii)]
 - (iv) Beginning June 3, 2027, or once the report template for 40 CFR 63, Subpart EEE has been available on the CEDRI website for one year, whichever date is later, submit the Notification of Compliance according to 40 CFR 63.1211(g). When the report is submitted via CEDRI, the certifier's electronic signature during the submission process satisfies the requirement in 40 CFR 63.9(h)(2)(i) for the

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

- responsible official to sign and certify the accuracy of the report. [40 CFR 63.1210(d)(1)(iv)]
- (2) Upon postmark of the Notification of Compliance, the operating parameter limits identified in the Notification of Compliance, as applicable, shall be complied with, the limits identified in the Documentation of Compliance or a previous Notification of Compliance are no longer applicable. [40 CFR 63.1210(d)(2)]
 - (3) The Notification of Compliance requirements of 40 CFR 63.1207(j) also apply. [40 CFR 63.1210(d)(3)]
- f. *Notification of compliance* – [40 CFR 63.1207(j)]
- (1) *Comprehensive performance test*. [40 CFR 63.1207(j)(1)]
 - (i) Except as provided by 40 CFR 63.1207(j)(4) and (5), within 90 days of completion of a comprehensive performance test, the permittee must postmark a Notification of Compliance documenting compliance with the emission standards and continuous monitoring system requirements, and identifying operating parameter limits under 40 CFR 63.1209. [40 CFR 63.1207(j)(1)(i)]
 - (ii) Upon postmark of the Notification of Compliance, the permittee must comply with all operating requirements specified in the Notification of Compliance in lieu of the limits specified in the Documentation of Compliance required under 40 CFR 63.1211(c). [40 CFR 63.1207(j)(1)(ii)]
 - (2) *Confirmatory performance test*. Except as provided by 40 CFR 63.1207(j)(4), within 90 days of completion of a confirmatory performance test, the permittee must postmark a Notification of Compliance documenting compliance or noncompliance with the applicable dioxin/furan emission standard. [40 CFR 63.1207(j)(2)]
 - (3) See 40 CFR 63.7(g), 40 CFR 63.9(h), and 40 CFR 63.1210(d) for additional requirements pertaining to the Notification of Compliance (*e.g.*, the permittee must include results of performance tests in the Notification of Compliance). Beginning November 30, 2026, the permittee must include in the Notification of Compliance a summary of the results of performance test and the performance test report must be submitted according to 40 CFR 63.1211(f). [40 CFR 63.1207(j)(3)]
 - (4) *Time extension*. The permittee may submit a written request to the Administrator for a time extension documenting that, for reasons beyond the permittee's control, the permittee may not be able to meet the 90-day deadline for submitting the Notification of Compliance after completion of testing. The Administrator will determine whether a time extension is warranted. [40 CFR 63.1207(j)(4)]
- g. *Data analysis, recordkeeping, and reporting*. [40 CFR 63.7(g)]
- (1) Results of a performance test shall include the analysis of samples, determination of emissions, and raw data. A performance test is "completed" when field sample collection is terminated. The results of the performance test shall be submitted as part of the Notification of Compliance required under 40 CFR 63.9(h). The permittee shall send the results of the performance test to the Division. [40 CFR 63.7(g)(1)]
 - (2) Contents of a performance test, Continuous monitoring system (CMS) performance evaluation, or CMS quality assurance test report (electronic or paper submitted copy). Unless otherwise specified in a relevant standard, test method, CMS performance specification, or quality assurance requirement for a CMS, or as otherwise approved

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

- by the Administrator in writing, the report shall include the elements identified 40 CFR 63.7(g)(2)(i) through (vi). [40 CFR 63.7(g)(2)]
- (i) General identification information for the facility including a mailing address, the physical address, the owner or operator or responsible official (where applicable) and his/her email address, and the appropriate Federal Registry System (FRS) number for the facility. [40 CFR 63.7(g)(2)(i)]
 - (ii) Purpose of the test including the applicable regulation requiring the test, the pollutant(s) and other parameters being measured, the applicable emission standard, and any process parameter component, and a brief process description. [40 CFR 63.7(g)(2)(ii)]
 - (iii) Description of the emission unit tested including fuel burned, control devices, and vent characteristics; the appropriate source classification code (SCC); the permitted maximum process rate (where applicable); and the sampling location. [40 CFR 63.7(g)(2)(iii)]
 - (iv) Description of sampling and analysis procedures used and any modifications to standard procedures, quality assurance procedures and results, record of process operating conditions that demonstrate the applicable test conditions are met, and values for any operating parameters for which limits were being set during the test. [40 CFR 63.7(g)(2)(iv)]
 - (v) Where a test method, CEMS performance specification, or on-going quality assurance requirement for a CEMS requires the permittee record or report, the following shall be included in the permittee's report: Record of preparation of standards, record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, chain-of-custody documentation, and example calculations for reported results. [40 CFR 63.7(g)(2)(v)]
 - (vi) Identification of the company conducting the performance test including the primary office address, telephone number, and the contact for this test including his/her email address. [40 CFR 63.7(g)(2)(vi)]
- h. *Failure to submit a timely notification of compliance.* [40 CFR 63.1207(k)]
- (1) If the permittee fails to postmark a Notification of Compliance by the specified date, the permittee must cease hazardous waste burning immediately. [40 CFR 63.1207(k)(1)]
 - (2) Prior to submitting a revised Notification of Compliance as provided by 40 CFR 63.1207(k)(3), the permittee may burn hazardous waste only for the purpose of pretesting or comprehensive performance testing and only for a maximum of 720 hours (renewable at the discretion of the Administrator). [40 CFR 63.1207(k)(2)]
 - (3) The permittee must submit to the Administrator a Notification of Compliance subsequent to a new comprehensive performance test before resuming hazardous waste burning. [40 CFR 63.1207(k)(3)]
- i. If the permittee has failed to demonstrate compliance with the emissions standards for any mode of operation, the permittee must submit to the Administrator a Notification of Compliance subsequent to the new comprehensive performance test. [40 CFR 63.1207(l)(1)(ii) and (l)(1)(ii)(C)]

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

- j. If the permittee determines that the permittee has failed the dioxin/furan emission standard during a confirmatory performance test: [40 CFR 63.1207(l)(2)]
 - (1) The permittee must submit to the Administrator for review and approval a test plan to conduct a comprehensive performance test to identify revised limits on the applicable dioxin/furan operating parameters specified in 40 CFR 63.1209(k); [40 CFR 63.1207(l)(2)(i)]
 - (2) The permittee must submit to the Administrator a Notification of Compliance with the dioxin/furan emission standard under the provisions of 40 CFR 63.1207(j) and (k) and 40 CFR 63.1207(l). The permittee must include in the Notification of Compliance the revised limits on the applicable dioxin/furan operating parameters specified in 40 CFR 63.1209(k); and [40 CFR 63.1207(l)(2)(ii)]
 - (3) Until the Notification of Compliance is submitted, the permittee must not burn hazardous waste except for purposes of pretesting or confirmatory performance testing, and for a maximum of 720 hours (renewable at the discretion of the Administrator), except as provided by 40 CFR 63.1207(l)(3). [40 CFR 63.1207(l)(2)(iii)]
- k. The permittee may petition the Administrator to obtain written approval to burn hazardous waste in the interim prior to submitting a Notification of Compliance for purposes other than testing or pretesting. The permittee must specify operating requirements, including limits on operating parameters, that the permittee determines will ensure compliance with the emission standards of 40 CFR 63, Subpart EEE based on available information including data from the failed performance test. The Administrator will review, modify as necessary, and approve if warranted the interim operating requirements. An approval of interim operating requirements will include a schedule for submitting a Notification of Compliance. [40 CFR 63.1207(l)(3)]
- l. *Notification of performance test and CMS performance evaluation, and approval of test plan and CMS performance evaluation plan.* [40 CFR 63.1207(e)]
 - (1) The provisions of 40 CFR 63.7(b) and (c) apply, except: [40 CFR 63.1207(e)(1)]
 - (i) *Comprehensive performance test.* The permittee must submit to the Administrator a notification of the permittee's intention to conduct a comprehensive performance test and CMS performance evaluation and a site-specific test plan and CMS performance evaluation test plan at least one year before the performance test and performance evaluation are scheduled to begin. [40 CFR 63.1207(e)(1)(i)]
 - (A) The Administrator will notify the permittee of approval or intent to deny approval of the site-specific test plan and CMS performance evaluation test plan within 9 months after receipt of the original plan. [40 CFR 63.1207(e)(1)(i)(A)]
 - (B) The permittee must submit to the Administrator a notification of the permittee's intention to conduct the comprehensive performance test at least 60 calendar days before the test is scheduled to begin. [40 CFR 63.1207(e)(1)(i)(B)]
 - (ii) *Confirmatory performance test.* The permittee must submit to the Administrator a notification of the permittee's intention to conduct a confirmatory performance

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

test and CMS performance evaluation and a site-specific test plan and CMS performance evaluation test plan for those parameters required under 40 CFR 63.1207(b)(2)(ii) at least 60 calendar days before the performance test is scheduled to begin. The Administrator will notify the permittee of approval or intent to deny approval of the site-specific test plan and CMS performance evaluation test plan within 30 calendar days after receipt of the original test plans. [40 CFR 63.1207(e)(1)(ii)]

- (2) The permittee must make their site-specific test plan and CMS performance evaluation test plan available to the public for review no later than 60 calendar days before initiation of the test. The permittee must issue a public notice to all persons on the permittee's facility/public mailing list (developed pursuant to 40 CFR 70.7(h), 40 CFR 71.11(d)(3)(i)(E) and 40 CFR 124.10(c)(1)(ix)) announcing the availability of the test plans and the location where the test plans are available for review. The test plans must be accessible to the public for 60 calendar days, beginning on the date that the permittee issues their public notice. The location must be unrestricted and provide access to the public during reasonable hours and provide a means for the public to obtain copies. The notification must include the following information at a minimum: [40 CFR 63.1207(e)(2)]
 - (i) The name and telephone number of the source's contact person; [40 CFR 63.1207(e)(2)(i)]
 - (ii) The name and telephone number of the regulatory agency's contact person; [40 CFR 63.1207(e)(2)(ii)]
 - (iii) The location where the test plans and any necessary supporting documentation can be reviewed and copied; [40 CFR 63.1207(e)(2)(iii)]
 - (iv) The time period for which the test plans will be available for public review; and [40 CFR 63.1207(e)(2)(iv)]
 - (v) An expected time period for commencement and completion of the performance test and CMS performance evaluation test. [40 CFR 63.1207(e)(2)(v)]
- (3) *Petitions for time extension if Administrator fails to approve or deny test plans.* The permittee may petition the Administrator under 40 CFR 63.7(h) to obtain a "waiver" of any performance test—initial or periodic performance test; comprehensive or confirmatory test. The "waiver" would be implemented as an extension of time to conduct the performance test at a later date. [40 CFR 63.1207(e)(3)]
 - (i) *Qualifications for the waiver.* [40 CFR 63.1207(e)(3)(i)]
 - (A) The permittee may not petition the Administrator for a waiver under 40 CFR 63.1207 if the Administrator has issued a notification of intent to deny the permittee's test plan(s) under 40 CFR 63.7(c)(3)(i)(B); [40 CFR 63.1207(e)(3)(i)(A)]
 - (B) The permittee must submit a site-specific emissions testing plan and a continuous monitoring system performance evaluation test plan at least one year before a comprehensive performance test is scheduled to begin as required by 40 CFR 63.1207(c)(1), or at least 60 days before a confirmatory performance test is scheduled to begin as required by 40 CFR 63.1207(d). The test plans must include all required documentation, including the substantive content requirements of 40 CFR 63.1207(f) and 40 CFR 63.8(e); and [40 CFR 63.1207(e)(3)(i)(B)]

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

- (C) The permittee must make a good faith effort to accommodate the Administrator's comments on the test plans. [40 CFR 63.1207(e)(3)(i)(C)]
- (ii) *Procedures for obtaining a waiver and duration of the waiver.* [40 CFR 63.1207(e)(3)(ii)]
 - (A) The permittee must submit to the Administrator a waiver petition or request to renew the petition under 40 CFR 63.7(h) separately for each source at least 60 days prior to the scheduled date of the performance test; [40 CFR 63.1207(e)(3)(ii)(A)]
 - (B) The Administrator will approve or deny the petition within 30 days of receipt and notify the permittee promptly of the decision; [40 CFR 63.1207(e)(3)(ii)(B)]
 - (C) The Administrator will not approve an individual waiver petition for a duration exceeding 6 months; [40 CFR 63.1207(e)(3)(ii)(C)]
 - (D) The Administrator will include a sunset provision in the waiver ending the waiver within 6 months; [40 CFR 63.1207(e)(3)(ii)(D)]
 - (E) The permittee may submit a revised petition to renew the waiver under 40 CFR 63.7(h)(3)(iii) at least 60 days prior to the end date of the most recently approved waiver petition; [40 CFR 63.1207(e)(3)(ii)(E)]
 - (F) The Administrator may approve a revised petition for a total waiver period up to 12 months. [40 CFR 63.1207(e)(3)(ii)(F)]
- (iii) *Contents of the waiver.*
 - (A) The permittee must provide documentation to enable the Administrator to determine that the source is meeting the relevant standard(s) on a continuous basis as required by 40 CFR 63.7(h)(2). For extension requests for the initial comprehensive performance test, the permittee must submit their Documentation of Compliance to assist the Administrator in making this determination. [40 CFR 63.1207(e)(3)(iii)(A)]
 - (B) The permittee must include in the petition information justifying the permittee's request for a waiver, such as the technical or economic infeasibility, or the impracticality, of the affected source performing the required test, as required by 40 CFR 63.7(h)(3)(iii). [40 CFR 63.1207(e)(3)(iii)(B)]
- (iv) *Public notice.* At the same time that the permittee submits their petition to the Administrator, the permittee must notify the public (e.g., distribute a notice to the facility/public mailing list developed pursuant to 40 CFR 70.7(h), 40 CFR 71.11(d)(3)(i)(E) and 40 CFR 124.10(c)(1)(ix)) of the permittee's petition to waive a performance test. The notification must include all of the following information at a minimum: [40 CFR 63.1207(e)(3)(iv)]
 - (A) The name and telephone number of the source's contact person; [40 CFR 63.1207(e)(3)(iv)(A)]
 - (B) The name and telephone number of the regulatory agency's contact person; [40 CFR 63.1207(e)(3)(iv)(B)]
 - (C) The date the source submitted its site-specific performance test plan and CMS performance evaluation test plans; and [40 CFR 63.1207(e)(3)(iv)(C)]
 - (D) The length of time requested for the waiver. [40 CFR 63.1207(e)(3)(iv)(D)]

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

- (4) If the permittee intends to comply with 40 CFR 63.1207(m), the permittee must state in the site-specific test plan that the permittee submits for review and approval under **6. Specific Reporting Requirements** l. that the permittee intends to comply with the provisions of 40 CFR 63.1207(m). The permittee must include in the test plan documentation that any surrogate that is proposed for gas flowrate adequately correlates with the gas flowrate. [40 CFR 63.1207(m)(5)]

- m. *Time extension for subsequent performance tests.* After the initial comprehensive performance test, the permittee may request up to a one-year time extension for conducting a comprehensive or confirmatory performance test to consolidate performance testing with other state or federally required emission testing, or for other reasons deemed acceptable by the Administrator. If the Administrator grants a time extension for a comprehensive performance test, the deadlines for commencing the next comprehensive and confirmatory tests are based on the date that the subject comprehensive performance test commences. [40 CFR 63.1207(i)]
- (1) The permittee must submit in writing to the Administrator any request under 40 CFR 63.1207(i), for a time extension for conducting a performance test. [40 CFR 63.1207(i)(1)]
- (2) The permittee must include in the request for an extension for conducting a performance test the following: [40 CFR 63.1207(i)(2)]
- (i) A description of the reasons for requesting the time extension. [40 CFR 63.1207(i)(2)(i)]
- (ii) The date by which the permittee will commence performance testing. [40 CFR 63.1207(i)(2)(ii)]
- (3) The Administrator will notify the permittee in writing of approval or intention to deny approval of the permittee's request for an extension for conducting a performance test within 30 calendar days after receipt of sufficient information to evaluate the permittee's request. The 30-day approval or denial period will begin after the permittee has been notified in writing that their application is complete. The Administrator will notify the permittee in writing whether the application contains sufficient information to make a determination within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that the permittee submits. [40 CFR 63.1207(i)(3)]
- (4) When notifying the permittee that their application is not complete, the Administrator will specify the information needed to complete the application. The Administrator will also provide notice of opportunity for the permittee to present, in writing, within 30 calendar days after notification of the incomplete application, additional information or arguments to the Administrator to enable further action on the application. [40 CFR 63.1207(i)(4)]
- (5) Before denying any request for an extension for performance testing, the Administrator will notify the permittee in writing of the Administrator's intention to issue the denial, together with: [40 CFR 63.1207(i)(5)]
- (i) Notice of the information and findings on which the intended denial is based; and [40 CFR 63.1207(i)(5)(i)]
- (ii) Notice of opportunity for the permittee to present in writing, within 15 calendar days after notification of the intended denial, additional information or arguments

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

- to the Administrator before further action on the request. [40 CFR 63.1207(i)(5)(ii)]
- (6) The Administrator's final determination to deny any request for an extension will be in writing and will set forth specific grounds upon which the denial is based. The final determination will be made within 30 calendar days after the presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made. [40 CFR 63.1207(i)(6)]
- n. In lieu of the requirement of 40 CFR 63.1207(m)(1)(ii)(C) and (D), the permittee may: [40 CFR 63.1207(m)(1)(iii)]
- (1) Identify in the Notification of Compliance a minimum gas flowrate limit and a maximum feedrate limit of mercury, semivolatile metals, low volatile metals, total fluorine and fluoride, and/or total chlorine and chloride from all feedstreams that ensures the MTEC as calculated in 40 CFR 63.1207(m)(1)(i)(C) is below the applicable emission standard; and [40 CFR 63.1207(m)(1)(iii)(A)]
- (2) See **1. Operating Limitations** y(3)(ii). [40 CFR 63.1207(m)(1)(iii)(B)]
- o. *Data compression.* The permittee may submit a written request to the Administrator for approval to use data compression techniques to record data from CMS, including CEMS, on a frequency less than that required by 40 CFR 63.1209. The permittee must submit the request for review and approval as part of the comprehensive performance test plan. [40 CFR 63.1211(d)]
- (1) The permittee must record a data value at least once each ten minutes. [40 CFR 63.1211(d)(1)]
- (2) For each CEMS or operating parameter for which the permittee requests to use data compression techniques, the permittee must recommend: [40 CFR 63.1211(d)(2)]
- (i) A fluctuation limit that defines the maximum permissible deviation of a new data value from a previously generated value without requiring the permittee to revert to recording each one-minute value. [40 CFR 63.1211(d)(2)(i)]
- (A) If the permittee exceeds a fluctuation limit, the permittee must record each one-minute value for a period of time not less than ten minutes. [40 CFR 63.1211(d)(2)(i)(A)]
- (B) If neither the fluctuation limit nor the data compression limit are exceeded during that period of time, the permittee may reinitiate recording data values on a frequency of at least once each ten minutes; and [40 CFR 63.1211(d)(2)(i)(B)]
- (ii) A data compression limit defined as the closest level to an operating parameter limit or emission standard at which reduced data recording is allowed. [40 CFR 63.1211(d)(2)(ii)]
- (A) Within this level and the operating parameter limit or emission standard, the permittee must record each one-minute average. [40 CFR 63.1211(d)(2)(ii)(A)]
- (B) The data compression limit should reflect a level at which the permittee is unlikely to exceed the specific operating parameter limit or emission standard,

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

considering its averaging period, with the addition of a new one-minute average. [40 CFR 63.1211(d)(2)(ii)(B)]

- p. *Electronic Reporting.* Within 90 days after the date of completing each performance test or continuous emissions monitoring system (CEMS) performance evaluation (as defined in 40 CFR 63.2) that includes a relative accuracy test audit (RATA), required by 40 CFR 63, Subpart EEE, the permittee must submit the results of the performance test following the procedure specified in 40 CFR 63.9(k). Submit the data in a file format generated using the EPA's Electronic Reporting Tool (ERT). Alternatively, the permittee may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) accompanied by the other information required by 40 CFR 63.7(g)(2) in PDF format. [40 CFR 63.1211(f)]
- q. *Reporting Confidential Business Information.* Where directed to 40 CFR 63.1211(g), the permittee must submit all subsequent reports or notifications in the format specified in the referring paragraph to the EPA following the procedure specified in 40 CFR 63.9(k), except any medium submitted as Confidential Business Information must be sent to the attention of the Hazardous Waste Combustion Sector Lead. [40 CFR 63.1211(g)]
- r. *SCR Operating Plan* [401 KAR 52:020, Section 10]
 - (1) No later than the initial startup date, the permittee shall submit to the Regional Office listed on the front of this permit an SCR Operating Plan containing the information listed below:
 - (i) Documentation demonstrating that the SCR system will achieve 90% control efficiency during maximum pollutant loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and NO_x content under varying hazardous waste firing rates and manufacturer's design specifications for the SCR system.
 - (ii) A description of the parameters to be monitored to ensure that the SCR system will be operated in conformance with its design and an explanation of the criteria used for selection of those parameters.
 - (A) Parameters to be monitored shall include, at minimum:
 - (1) NO_x concentrations indicated by a process analyzer both prior to and after the SCR system recorded no less frequently than once every operating day; and
 - (2) Ammonia injection rate monitored no less frequently than once every 15 minutes.
 - (iii) A detailed description of procedures for operating and maintaining the SCR system during periods of startup, shutdown, and malfunction, including malfunctioning monitoring equipment.
 - (iv) The plan must prescribe how the permittee will operate and maintain the SCR system in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels estimated in the permit application or initial performance test, once completed.
 - (2) *Responsibility of the permittee.* The permittee is responsible for ensuring that the permittee submits any supplementary and additional information supporting their plan

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

- in a timely manner to enable the Division to consider whether to approve the plan. Neither the permittee's submittal of the plan, nor the Division's failure to approve or disapprove the plan, relieves the permittee of the responsibility to comply with the provisions of this permit, including, but not limited to, source-wide emission limitations specified in **Section D** and the requirement to maintain and operate air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions specified in **Section E**.
- (3) *Changes to the plan.* Following the initial submittal, the permittee shall submit requests to alter the plan in accordance with the requirements of 401 KAR 52:020, Sections 14, 16, 17, or 18 based upon the criteria of those provisions and the content of the change.

7. Specific Control Equipment Operating Conditions:

- a. To preclude 401 KAR 51:017 for SO_x, the permittee must properly operate the Dry Sorbent Injection system (DSI) at all times when hazardous waste is fed to or remains in the combustion chamber. [401 KAR 52:020, Section 10]

Compliance Demonstration Method:

The permittee must comply with the *dry scrubber* operating parameter limits of 40 CFR 63.1209(o)(4)(i) and (ii) (see **1. Operating Limitations u(3)**) and the following:

- (a) The permittee must specify and use the brand (i.e., manufacturer) and type of sorbent used during the comprehensive performance test until a subsequent comprehensive performance test is conducted, unless the permittee documents in the SO_x performance test plan key parameters that affect adsorption (of SO₂ and SO₃) and establish limits on those parameters based on the sorbent used in the performance test.
- (b) The permittee may substitute at any time a different brand or type of sorbent provided that the replacement has equivalent or improved properties (for control of SO₂ and SO₃) compared to the sorbent used in the performance test and conforms to the key sorbent parameters the permittee identifies under (a) above. The permittee must record documentation that the substitute sorbent will provide the same level of control as the original sorbent. See **5. Specific Recordkeeping Requirements h**.
- b. To preclude 401 KAR 51:017 for NO_x, the permittee must properly operate the Selective Catalytic Reduction system (SCR) at all times when hazardous waste is fed to or remains in the combustion chamber. [401 KAR 52:020, Section 10]

Compliance Demonstration Method:

To demonstrate initial compliance, the permittee must conduct a performance test according to **3. Testing Requirements q**, in order to establish a NO_x emission factor and control efficiency of the SCR system. To demonstrate continuous compliance, the permittee must operate in accordance with the SCR Control Plan required by **6. Specific Reporting Requirements r**, at all times and conduct subsequent performance tests. See **1. Operating Requirements z**, **3. Testing Requirements q**, **4. Specific Monitoring Requirements l**, and **5. Specific Recordkeeping Requirements i** and **j**.

SECTION C - INSIGNIFICANT ACTIVITIES

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

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. (016) Two (2) Cord Printers identified as Print-1, and Print-2	401 KAR 63:020
2. (EP IA2) Cord Plant vehicle fuel storage tank, identified as CFT-1, with a capacity of 2,000 gallons and storing diesel fuel oil.	401 KAR 63:020
3. (EP 51) Pentaerythritol (PE) Blending operation, - Discharge bulk bag into hopper - Mix ingredients in rotary batch mixer - Vent system through Dust Collector (integral) - Outlet Exhaust: 0.002 grains per dry standard cubic feet (gr/dscf) - Rated Capacity: 8,940 lbs/hr - Construct Date: 3/2017	401 KAR 59:010
4. (EP IA4) Nitration Lab Vent Hood	401 KAR 63:020
5. (EP IA5) Solvent Parts Washer in Cord Maintenance	None
6. (EP IA7) Welding Fume Hood in Cord Maintenance	401 KAR 63:020
7. (EP IA8) Solvent Parts Washer in Nitration Maintenance	None
8. (EP IA9) Welding Fume Hood in Nitration Maintenance	401 KAR 63:020
9. (EP IA10) Nitration Lab Vent Hood for Acids/Acetones	401 KAR 63:020
10. (EP IA11) Quality Testing of Detonating Cord	401 KAR 63:020
11. (HAULRD) Paved Haul Roads	401 KAR 63:010
12. (RMH-3) 78,307 Gallons 97% Sulfuric Acid Tank	401 KAR 63:020
13. (RMH-10) 550 Gallons Diesel Tank	401 KAR 63:020
14. (TNT-2) Washers 3-5	401 KAR 59:010

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

15. (TNT-3) Drying	401 KAR 59:010
16. (TNT-4) Flaking	401 KAR 59:010
17. (TNT-5) Packaging	401 KAR 59:010
18. (TNT-6) Sodium Sulfite Bag Unloading	401 KAR 59:010
19. (TNT-7) Sodium Bisulfite Bag Unloading	401 KAR 59:010
20. (UTIL-5) Cooling Tower 1	401 KAR 59:010
21. (UTIL-6) Cooling Tower 2	401 KAR 59:010
22. (U5-EF1) TNT Production Building Vent 1	401 KAR 63:010
23. (U5-EF2) TNT Production Building Vent 2	401 KAR 63:010
24. (U5-EF3) TNT Production Building Vent 3	401 KAR 63:010
25. (U5-EF4) TNT Production Building Vent 4	401 KAR 63:010
26. (U8-EF1) TNT Packaging Building Vent 1	401 KAR 63:010
27. (U8-EF2) TNT Packaging Building Vent 2	401 KAR 63:010
28. (U6-EF1) Sellite Preparation Building Vent 1	401 KAR 63:010

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

- 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.
- Particulate matter (PT/PM₁₀/PM_{2.5}), carbon monoxide (CO), nitrogen oxides (NO_x), sulfur oxides (SO_x), sulfur dioxide (SO₂), nitric acid, dioxins and furans, mercury, cadmium and lead, arsenic, beryllium, and chromium, and hydrogen chloride and chlorine gas 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.
- Source Emission Limitations:**
To preclude the applicability of 401 KAR 51:017, *Prevention of significant deterioration of air quality* (for PM/PM₁₀/PM_{2.5}, CO, NO_x, and SO_x), total source wide actual emissions of PM, CO, NO_x, and SO_x shall not exceed 90 tons per year, each, on a consecutive twelve-month rolling total basis.

Compliance Demonstration Method:

- Compliance with the source-wide emission limitation for PM/PM₁₀/PM_{2.5} is demonstrated by complying with the particulate emission standards of 40 CFR 63.1219(b)(7) for TDU-1.
- Compliance with the source-wide emission limitations for CO, NO_x, and SO_x shall be demonstrated by calculating twelve-month rolling total emissions by adding the pollutant specific monthly emissions to the previous eleven months' emissions. Monthly emissions shall be calculated for each pollutant using CEMS data, where available, and the following formula:

$$Pollutant\ Emissions\left(\frac{tons}{month}\right) = \sum \left(\frac{EF \times P}{2000 \frac{lb}{ton}} \times \left(\frac{100 - Control\ Efficiency}{100} \right) \right)$$

Where EF is the emission factor of each pollutant in the table below for each unit, in lb/SCC units shown, until specific values have been established during the most recent performance test, once conducted, P is the monthly processing rate of each unit in terms of the SCC units, and Control Efficiency is the value listed in the following table until unit specific values have been established during the most recent performance test, once conducted (if required).

Emission Unit (Process ID)	Process Name	Control Efficiency (%)	EF _{CO}	EF _{NO_x}	EF _{SO_x}	SCC Units
009	Sulfuric Acid Recovery	0	0	0	0.7	ton
012 (01)	Breathing Loss	0	0	0	6.4E-2	1000 gallon-yr
012 (02)	Working Loss	0	0	0	6.4E-4	1000 gallon

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

Emission Unit (Process ID)	Process Name	Control Efficiency (%)	EF _{CO}	EF _{NO_x}	EF _{SO_x}	SCC Units
012 (03)	Flanges	0	0	0	13.27	Each-yr
012 (04)	Valves	0	0	0	140.5	Each-yr
012 (05)	Pumps	0	0	0	546	Each-yr
017	Natural Gas Combustion	0	84	100	0.6	MMscf
019	Natural Gas Combustion	0	84	32	0.6	MMscf
UTIL-1	Natural Gas Combustion	0	84	50	0.6	MMscf
UTIL-2	Diesel Combustion	0	91.69	101.50	39.74	1000 gallons
UTIL-3	Natural Gas Combustion	0	1156.92	578.46	0.60	MMscf
UTIL-4	Natural Gas Combustion	0	1156.92	578.46	0.60	MMscf
RMH-2A	Oleum Tank Storage/Loading Losses	99	0	0	21.0	1000 gallons
RMH-2C	Oleum Blending Surge Tank	99	0	0	6.70	1000 gallons
RMH-4A	Total Losses	0	0	2.55	0	1000 gallons
RMH-4B	Total Losses	0	0	0.13	0	1000 gallons
RMH-4C	Total Losses	0	0	1.95	0	1000 gallons
TNT-1 (01) ^{a, b}	TNT-1	99.80	22.76	25.46	0	Tons
TNT-1 (02) ^{a, b}	TNM Combustion	0	0	9.39	0	Tons
TNT-1 (N/A) ^c	Emergency Venting	0	See note	See note	0	N/A
ARU-1 (01) ^a	Acid Recovery Unit Vents	99.84	0	62.53	0	Tons
ARU-1 (02) ^a	Thermal Oxidizer Burner	0	84	100	0.6	MMscf
RMH-5 ^a	Total Losses	99	0	0.337	0	1000 gallons
TDU-1 (01) ^d	Normal Operation	0	0.66	N/A	N/A	Tons
		90	N/A	10.77	28.36	
TDU-1 (02) ^{d, e}	Startup Shutdown	0	84	100	0.6	MMscf

^a Units vent through a common stack. NO_x emission factors shall be used to calculate emissions for any periods in which CEMS data is not available or as described in **Section B**.

^b Processing rate for TNT-1, Process ID 01 is in terms of tons/hr raw material input, whereas Process ID 02 is in terms of tons/hr TNT produced.

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

- ^c Permittee must estimate emissions from Emergency Venting events using process knowledge and engineering estimates.
- ^d Both process IDs vent through the same stack. CO emission factors shall be used to calculate emissions for any periods in which CO CEMS data is not available.
- ^e Processing rate includes natural gas burned during startup and shutdown only.

4. Source Recordkeeping Requirements:

- a. The permittee shall maintain records of monthly emissions and 12-month rolling total emissions calculated according to the **Compliance Demonstration Method** above.
- b. The permittee shall maintain records of monthly process rates for each of the units listed in the table above in terms of the SCC units shown for each unit.
 - (1) Monthly processing rates for units with an SCC unit of “Each-yr” shall be calculated using the following formula:

$$P = P_{\text{annual}} \times (n/365)$$

Where:

P	=	Monthly processing rate/capacity
P _{annual}	=	Annual processing rate/capacity
N	=	Number of days in the month

- c. The permittee shall maintain records of performance test reports, emission factor calculations, and the Division’s approval of such results to support any change to the emission factors or control efficiencies listed in the table above. These records shall be maintained for as long as the updated emission factor or control efficiency is utilized plus an additional 5 years once the emission factor is superseded by another performance test-based emission factor.

5. Source Reporting Requirements

The permittee shall report monthly and 12-month rolling totals of emissions calculated according to the **Compliance Demonstration Method** above in the semi-annual report required by **Section F. 5.** and **6.** Detailed emission calculations are not required to be included in the semi-annual report but must be made available to the Division for review upon request.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

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

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five (5) years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020, Section 3(1)h, the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

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

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

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

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

Division for Air Quality
Owensboro Regional Office
3032 Alvey Park Dr. W., Suite 700
Owensboro, KY 42303

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

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

SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

- a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020, Section 3(1)(b), and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - (2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
 - (4) New requirements become applicable to a source subject to the Acid Rain Program.

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

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

SECTION G - GENERAL PROVISIONS (CONTINUED)

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements. [Section 1a-15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3) b].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3) d.].
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3) a.].

SECTION G - GENERAL PROVISIONS (CONTINUED)

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

2. Permit Expiration and Reapplication Requirements

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

3. Permit Revisions

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

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

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission units UTIL-1, UTIL-2, UTIL-3, UTIL-4, RMH-1A, RMH-1B, RMH-1C, RMH-2, RMH-4, TNT-1, ARU-1,

SECTION G - GENERAL PROVISIONS (CONTINUED)

RMH-5, ARU-2, and TDU-1, in accordance with the terms and conditions of this permit, V-26-044.

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

5. Testing Requirements

- a. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test

SECTION G - GENERAL PROVISIONS (CONTINUED)

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

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

6. Acid Rain Program Requirements

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

7. Emergency Provisions

- a. Pursuant to 401 KAR 52:020, Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - (1) An emergency occurred and the permittee can identify the cause of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.1-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an

SECTION G - GENERAL PROVISIONS (CONTINUED)

emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.

- (5) This requirement does not relieve the source of other local, state or federal notification requirements.

- b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

8. Ozone Depleting Substances

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

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.

SECTION H - ALTERNATE OPERATING SCENARIOS

N/A

SECTION I - COMPLIANCE SCHEDULE

N/A