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 52:030

Permittee Name:	**Green Mountain Energy, LLC**
Mailing Address:	**4460 Salt Spring Drive, Ferndale, WA 98248**
Source Name:	**Green Mountain Energy, LLC**
Mailing Address:	**4460 Salt Spring Drive, Ferndale, WA 98248**
Source Location:	**7545 Noble Road, West Paducah, KY 42086**
Permit ID:	**F-25-019**
Agency Interest #:	**184811**
Activity ID:	**APE20250001**
Review Type:	**Conditional Major/ Synthetic Minor, Construction/Operating**
Source ID:	**21-145-00157**
Regional Office:	**Paducah Regional Office 130 Eagle Nest Drive Paducah, KY 42003 (270) 898-8468**
County:	**McCracken**
Application Complete Date:	**July 1, 2025**
Issuance Date:	
Expiration Date:	

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

TABLE OF CONTENTS

Permit	Permit Type	Activity #	Complete Date	Issuance Date	Summary of Action
F-25-019	Initial	APE20250001	7/1/2025		Initial Construction Permit

SECTION A - PERMIT AUTHORIZATION

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

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

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

EP-001 **Cooling Tower**

Description: Circulation rate: 619 gallons/minute
Solids content: 5,000 mg/l
Equipped with drift eliminator with 0.005% Drift Loss
Date of Construction: 2025 (Proposed)

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

1. **Operating Limitations:**
   None

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

   b. For emissions from a control device or stack no person shall cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of 2.34 lb/hr as specified in Appendix A to 401 KAR 59:010. [401 KAR 59:010, Section 3(2)]

   Compliance Demonstration Method:
   The permittee is assumed to be in compliance with **2. Emission Limitations** a. and b. based on the emission factor provided in the application.

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

4. **Specific Monitoring Requirements:**
   None

5. **Specific Recordkeeping Requirements:**
   The permittee shall record all routine and non-routine maintenance activities performed on the corresponding control device. [401 KAR 52:030, Section 10]

6. **Specific Reporting Requirements:**
   Refer to **Section F - Monitoring, Recordkeeping, and Reporting Requirements**.

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

HaulRD **Haul Roads**

Description: Maximum Vehicle Miles Traveled/year: 3837.7 miles/year
Road type: Paved
Date of Construction: 2025 (Proposed)

APPLICABLE REGULATIONS:
401 KAR 63:010, *Fugitive Emissions*

1. **Operating Limitations:**
   a. A person shall not cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished; or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Reasonable precautions shall include, as applicable: [401 KAR 63:010, Section 3(1)]
      1) Use, if possible, of water or suitable chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land; [401 KAR 63:010, Section 3(1)(a)]
      2) Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts; [401 KAR 63:010, Section 3(1)(b)]
      3) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations. [401 KAR 63:010, Section 3(1)(c)]
      4) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne; [401 KAR 63:010, Section 3(1)(d)]
      5) The maintenance of paved roadways in a clean condition; or [401 KAR 63:010, Section 3(1)(e)]
      6) The prompt removal of earth or other material from a paved street to which earth or other material has been transported by trucking or earth moving equipment or erosion by water. [401 KAR 63:010, Section 3(1)(f)]

   b. If dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may, based on the cause, type, or amount of a fugitive emission, order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air. [401 KAR 63:010, Section 3(3)]

   c. At all times while in motion, open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered. [401 KAR 63:010, Section 4(1)]

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

d. A person shall not cause, suffer, or allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. [401 KAR 63:010, Section 4(3)]

2. Emission Limitations:

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

a. More than five (5) minutes of emission time during any sixty (60) minute observation period; or [401 KAR 63:010, Section 3(2)(a)]

b. More than twenty (20) minutes of emission time during any twenty-four (24) hour period. [401 KAR 63:010, Section 3(2)(b)]

3. Testing Requirements:

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

4. Specific Monitoring Requirements:

a. The permittee shall monitor the reasonable precautions taken to prevent particulate matter from becoming airborne on a daily basis. [401 KAR 52:030, Section 10]

b. If fugitive dust emissions beyond the lot line of the property are observed, the permittee shall conduct U.S. EPA Reference Method 22 (visual determination of fugitive emissions) observations per Appendix A of 40 C.F.R. Part 60. In lieu of conducting U.S. EPA Reference Method 22, the permittee shall immediately perform a corrective action which results in no visible fugitive dust emissions beyond the lot line of the property. [401 KAR 52:030, Section 10]

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain a log of the reasonable precautions taken to prevent particulate matter from becoming airborne, on a daily basis. Notation of the operating status, down-time, or relevant weather conditions are acceptable for entry to the log. [401 KAR 52:030, Section 10]

b. The permittee shall maintain a log of the following: [401 KAR 52:030, Section 10]
   1) Qualitative fugitive emissions observations conducted including the date, time, initials of observer, whether any fugitive dust emissions were observed;
   2) Any Reference Method 22 performed and field records identified in Reference Method 22;
   3) Any corrective action taken and the results.

6. Specific Reporting Requirements:

Refer to **Section F - Monitoring, Recordkeeping, and Reporting Requirements.**

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

Material Handling Emission Points

Description				
Units	**Process Name**	**Through-put (tons/hr)**	**Construction Date**	**Control Method**
EP-005	Pneumatic Unloading of Plastic into Silo	16.67	2025 (Proposed)	Baghouse (95% Control)
	Pneumatic transfer of Silo into Small Hopper	16.67		
	Supersack Unloading to Screener	0.50		
	Supersack Screener Transfer to Silo (TK-10101)	0.50		
	Oversized Material Box	0.05		None
EP-006	Train 1: Transfer from TK-10101 to Plastic Feed Hopper A/B (TK-12103-A/B))	8.33		Baghouse (95% Control)
EP-007	Train 1: Transfer from TK-10101 to Plastic Feed Hopper A/B (TK-12103-A/B))	8.33		
EP-009	Train 2: Transfer from TK-10101 to Plastic Feed Hopper A/B (TK-12103-A/B))	8.33		
EP-010	Train 2 Transfer from TK-10101 to Plastic Feed Hopper A/B (TK-12103-A/B))	8.33		
EP-012	Train 3: Transfer from TK-12103-A/B to Plastic Slurry Tank (TK-12104-A/B)	8.33		
EP-013	Train 3: Transfer from TK-12103-A/B to Plastic Slurry Tank (TK-12104-A/B)	8.33		
EP-014	Train 4: Transfer from TK-12103-A/B to Plastic Slurry Tank (TK-12104-A/B)	8.33		
EP-015	Train 4: Transfer from TK-12103-A/B to Plastic Slurry Tank (TK-12104-A/B)	8.33		
EP-016	Train 4: Transfer from TK-12103-A/B to Plastic Slurry Tank (TK-12104-A/B)	8.33		

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

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   a. For emissions from a control device or stack the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
      1) For $P \leq 0.5$ ton/hr: $E = 2.34$
      2) For P from 0.5 ton/hr to 30 ton/hr: $E = 3.59P^{0.62}$
      Where:
      E = rate of emission in lb/hr and;
      P = process weight rate in tons/hr.

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

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

Compliance Demonstration Method:

I) The units listed above are assumed to be in compliance with the PM emission limit when the control devices listed above are used in conjunction with the associated emission point and properly maintained. See **4. Specific Monitoring Requirements** a. and b. and **5. Specific Recordkeeping Requirements** a

II) For compliance with the opacity limitations, refer to **4. Specific Monitoring Requirements** a. through c. and **5. Specific Recordkeeping Requirements** b.

3. Testing Requirements:

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

4. Specific Monitoring Requirements:

a. The permittee shall install, calibrate, maintain, and operate a pressure drop monitoring device to continuously monitor the differential pressure across the baghouse to ensure that pressure does not drop outside the pressure drop range documented by the manufacturer's specifications. The permittee shall monitor the differential pressure reading across the baghouse at least once per shift, during times of operation. [401 KAR 52:030, Section 10]

b. The permittee shall conduct a monthly inspection of each emission point at the facility and their associated control equipment. [401 KAR 52:030, Section 10]

c. The permittee shall perform a qualitative visual observation of the opacity of emissions from the outlet of the control device no less frequently than monthly while the affected facility is operating. If visible emissions from the control device are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:030, Section 10]

d. The permittee shall monitor the amount of raw material processed (tons) for each affected facility on a monthly basis. [401 KAR 52:030, Section 10]

5. Specific Recordkeeping Requirements:

a. The permittee shall record all routine and non-routine maintenance activities performed on the control devices (dust collectors and baghouses). [401 KAR 52:030, Section 10]

b. The permittee shall maintain a log of the qualitative visual observations made as specified in **4. Monitoring Requirements** c. including the date, time, initials of observer, whether any emissions were observed (yes/no), and any U.S. EPA Reference Method 9 readings taken. [401 KAR 52:030, Section 10]

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

c. The permittee shall maintain records of the amount of raw material processed (tons) for each affected facility on a monthly basis. [401 KAR 52:030, Section 10]

6. Specific Reporting Requirements:
Refer to **Section F - Monitoring, Recordkeeping, and Reporting Requirements.**

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

Plastic Conversion Process (R-20001 & R-20002)

Description				
Plastic to hydrocarbon liquids conversion process, including two pyrolysis kilns, a scrubber, and fractionation process. Non-condensable gases from the process are burned for heat recovery in the Process Heaters (BUR-20002 & H-20002) or flared in the Relief Flare (EP-003) during periods of malfunction, process upset, and startup/shutdown.				
Equipment	**Facility ID**	**Maximum Input Rate (lb plastic/hr)**	**Emission Release Points**	**Construction Date**
R-20001	Primary Reactor	8,333	Process Heaters (BUR-20002 & H-20002); Relief Flare (EP-003)	2025 (Proposed)
R-20002	Secondary Reactor	8,333		

Process Heaters (BUR-20002 & H-20002)

Description				
Emission Unit	**Facility ID**	**Heat Capacity (MMBtu/hr)**	**Fuel Type**	**Construction Date**
B20002	Secondary Reactor Burner (BUR-20002)	3.89	Primary: Non-condensable Process gas Secondary: Natural gas	2025 (Proposed)
H20002	Secondary Reactor Heater (H-20002)	12		

APPLICABLE REGULATIONS:
401 KAR 59:015, *New indirect heat exchangers* (applies to the Process Heaters [BUR-20002 & H-20002])
401 KAR 59:105, *New process gas streams* (applies to the Plastic Conversion Process [R-20001 & R-20002])

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

PRECLUDED REGULATIONS:
401 KAR 51:017, *Prevention of significant deterioration of air quality*
401 KAR 52:020, *Title V permits*

1. **Operating Limitations:**
   a. **Operating Limitations for the Plastic Conversion Process (R-20001 & R-20002):**
      1) The non-condensable process gasses generated by R-20001 and/or R-20002 shall be combusted in the Process Heaters (BUR-20002 & H-20002) at all times when R-20001 and/or R-20002 is in operation, except during periods of startup and shutdown, process upset, and maintenance during which times all non-condensable process gasses shall be combusted by the Relief Flare (EP-003). [401 KAR 52:030, Section 10]

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

2) The permittee shall use only high-density polyethylene, low-density polyethylene, and polypropylene obtained from industrial sources as a feedstock within R-20001 & R-20002. [401 KAR 52:030, Section 10]

b. **Operating Limitations for the Process Heaters (BUR-20002 & H-20002):**

1) The permittee shall combust only natural gas and/or non-condensable process gasses generated by R-20001 & R-20002 in the Process Heaters (BUR-20002 & H-20002). [401 KAR 52:030, Section 10]

2) The permittee shall maintain the VOC control efficiency achieved during the most recent performance test approved by the Division, and which demonstrates compliance with the source-wide emission limitations in **Section D – Source Emission Limitations and Testing Requirements** when combusting any amount of process gas. [401 KAR 52:030, Section 10]

Compliance Demonstration Method:
Compliance shall be demonstrated according to **3. Testing Requirements** d.

3) The permittee shall install, operate, and maintain the Selective catalytic reduction (SCR) controls, on the Process Heaters (BUR-20002 & H-20002) according to the manufacturer's specifications, when combusting any amount of process gas. [401 KAR 52:030, Section 10]

Compliance Demonstration Method:
Compliance shall be demonstrated according to **3. Testing Requirements** c., **4. Specific Monitoring Requirements** c. & d., and **5. Specific Recordkeeping Requirements** d.

4) The average combustion chamber temperature in any rolling 3-hour period shall not fall below the minimum operating set point temperature established during the most recent performance test approved by the Division, when combusting any amount of process gas, excluding times when all non-condensable process gasses are being routed to the relief flare (EP-003). [401 KAR 52:030, Section 10]

Compliance Demonstration Method:
Compliance shall be demonstrated according to **3. Testing Requirements** c., **4. Specific Monitoring Requirements** e., and **5. Specific Recordkeeping Requirements** e.

5) During a startup period or shutdown period, the permittee shall comply with the work practice standards established in 401 KAR 59:015, Section 7. [401 KAR 59:015, Section 7]
   i. The permittee shall comply with 401 KAR 50:055, Section 2(5); [401 KAR 59:015, Section 7(1)(a)]
   ii. The frequency and duration of startup periods or shutdown periods shall be minimized by the affected facility; [401 KAR 59:015, Section 7(1)(b)]

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

iii. All reasonable steps shall be taken by the permittee to minimize the impact of emissions on ambient air quality from the affected facility during startup periods and shutdown periods; [401 KAR 59:015, Section 7(1)(c)]
iv. The actions, including duration of the startup period, of the permittee during startup and shutdown periods, shall be documented in signed, contemporaneous logs or other relevant evidence; [401 KAR 59:015, Section 7(1)(d)]
v. Startups and shutdowns shall be conducted according to either: [401 KAR 59:015, Section 7(1)(e)]
A) The manufacturer's recommended procedures; or [401 KAR 59:015, Section 7(1)(e)1.]
B) 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:
Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements** b.

2. Emission Limitations:

a. The permittee shall not cause emissions of particulate matter in excess of 0.50 lb/MMBtu actual heat input. [401 KAR 59:015, Section 4(1)(c)]

b. The permittee shall not cause emissions of particulate matter in excess of 20 percent opacity, except: [401 KAR 59:015, Section 4(2)]
1) A maximum of 40 percent opacity shall be allowed for a maximum of 6 consecutive minutes in any 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)]

c. The permittee shall not cause emissions of gases that contain sulfur dioxide in excess of 2.48 lb/MMBtu actual heat input. [401 KAR 59:015, Section 5(1)(c)(2.)(b.)]

Compliance Demonstration Method:
I) Compliance with the 401 KAR 59:015 mass emission standards and opacity standard are assumed when combusting 100% natural gas.
II) Compliance with the 401 KAR 59:015 particulate matter and sulfur dioxide mass emission standards when combusting any amount of process gas shall be demonstrated according to **3. Testing Requirements** b.
III) Compliance with the 401 KAR 59:015 Opacity standards when combusting any amount of process gas shall be demonstrated according to **4. Specific Monitoring Requirements** b. and **5. Specific Recordkeeping Requirements** c.

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

d. Emissions of hydrogen sulfide (H_2S) in a process gas stream shall not exceed 10 grains per 100 dscf (165 ppmv) at zero percent oxygen except that sources whose combined process gas stream emission rate totals less than 2 tons per day of H_2S shall either reduce such emissions by 85% or control such emissions such that H_2S in the gas stream emitted into the ambient air does not exceed 10 grains per 100 dscf (165 ppmv) at zero percent oxygen. [401 KAR 59:105, Section 3]

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

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

f. See **Section D - Source Emission Limitations and Testing Requirements**, 3.

3. Testing Requirements:

a. Within 60 days after achieving the maximum production rate at which R-20001 & R-20002 will be operated, but not later than 180 days after the initial start-up of R-20001 & R-20002 and the associated process units, the permittee shall conduct an initial test to determine the H_2S concentration (in grain/dscf or ppmv at 0% O_2) of the process gas stream exiting R-20001 & R-20002 using U.S. EPA Reference Method 11, or an alternate method as approved by the Division, to establish an appropriate H_2S concentration to determine compliance with the applicable 401 KAR 59:105 emission limitation. The samples shall be drawn from a point near the centroid of the gas line. The minimum sampling time shall be ten minutes and the minimum sample volume shall be 0.01 dscm (0.35 dscf) for each sample. The performance test shall consist of three runs. The arithmetic average of two samples shall constitute one run. Samples shall be taken at approximately 1 hour intervals. See **Section G - General Provisions**(5.)(a.) and (b.) for additional test conditions. [401 KAR 50:055, Section 2(2)(a) & 401 KAR 59:105, Section 6(1)]

b. Within 60 days after achieving the maximum production rate at which R-20001 & R-20002 will be operated, but not later than 180 days after the initial start-up of the R-20001 & R-20002 and the associated process units, the permittee shall conduct an initial performance test at the exhaust of each process heater (BUR-20002 & H-20002) to establish unit specific particulate matter (PM) and sulfur dioxide (SO_2) emission factors (in lb/mmscf), while combusting 100% process gas (or the highest achievable percentage of process gas). Performance testing shall be conducted using U.S. EPA Reference Method 5 for PM and Method 6 for SO_2, or other test methods as approved by the

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

Division. See **Section G - General Provisions**(5.)(a.) and (b.) for test conditions. These emission rates shall be used in determining compliance with the 401 KAR 59:015 particulate matter and sulfur dioxide emission standards when combusting process gas. [401 KAR 50:045, Section 2]

c. Within 60 days after achieving the maximum production rate at which R-20001 & R-20002 will be operated, but not later than 180 days after the initial start-up of the R-20001 & R-20002 and the associated process units, the permittee shall conduct an initial performance test at the exhaust of each process heater (BUR-20002 & H-20002) to establish an uncontrolled nitrogen oxides (NOx) emission factor (in lb/mmscf) while combusting 100% process gas (or the highest achievable percentage of process gas), and control efficiency of the SCR. Performance testing shall be conducted using U.S. EPA Reference Method 7, or other test methods as approved by the Division. See Section G - **General Provisions**(5.)(a.) and (b.) for test conditions. This emission rate and control efficiency shall be used in calculating source-wide NOx emissions per **Section D – Source Emission Limitations and Testing Requirements**. Subsequent performance testing shall be conducted no later than five years following the most recent performance test approved by the Division. [401 KAR 50:045, Section 2]
   1) The permittee shall monitor and record the ammonia/urea solution flow rate to the SCR and exhaust gas temperature at the inlet of the SCR at least once every 15 minutes during each test run. [401 KAR 50:045, Section 1]

d. Within 60 days after achieving the maximum production rate at which R-20001 & R-20002 will be operated, but not later than 180 days after the initial start-up of R-20001 & R-20002 and the associated process units, the permittee shall conduct an initial performance test to determine the uncontrolled VOC content (in lb/MMscf) of the process gas stream exiting R-20001 & R-20002 and the VOC control efficiency at the exhaust of each Process Heater (BUR-20002 & H-20002) using U.S. EPA Reference Method 25A, or an alternate method approved by the Division. See Section G - **General Provisions**(5.)(a.) and (b.) for test conditions. This control efficiency, for each Process Heater (BUR-20002 & H-20002), shall be used in calculating source-wide VOC emissions per **Section D – Source Emission Limitations and Testing Requirements**. Subsequent performance testing shall be conducted no later than five years following the most recent performance test approved by the Division. [401 KAR 50:055, Section 2]
   1) The permittee shall monitor and record the combustion chamber temperature at least once every 15 minutes during each test run. The average combustion chamber temperature established during the performance test shall be the minimum operating set point of each Process Heater (BUR-20002 & H-20002). [401 KAR 50:045, Section 1]

e. Within 60 days after achieving the maximum production rate at which R-20001 & R-20002 will be operated, but not later than 180 days after the initial start-up of R-20001 & R-20002 and the associated process units, the permittee shall conduct an initial performance test to determine the concentration of dioxins/furans (in ppmv) in the exhaust gas of the Process Heaters (BUR-20002 & H-20002), while combusting 100% process gas (or the highest achievable percentage of process gas), using U.S. EPA Reference Method 23 or an alternate method approved by the Division. The permittee

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

shall also note the amount of process gas combusted (mmscf) in Process Heaters (BUR-20002 & H-20002). See Section G - **General Provisions**(5.)(a.) and (b.) for test conditions. [401 KAR 50:055, Section 2]

f. 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:

a. The permittee shall monitor the following on a monthly basis: [401 KAR 52:030, Section 10]
   1) The weight (tons) and type of each plastic processed;
   2) The type (naphtha, diesel, or residue) and amount (gallons) of each product produced;
   3) The amount of non-condensable process gases produced (MMscf);
   4) The amount of natural gas combusted and the amount of process gas combusted in each process heater (BUR-20002 & H-20002) (MMscf);
   5) The hours of operation.

b. The permittee shall perform a qualitative visual observation of the opacity of emissions no less than daily while the affected facility is combusting any process gas. If after 180 days of daily visual observations there have been no visible emissions observed, then the permittee may reduce visual observations to no less than weekly while the affected facility is combusting any process gas. If during weekly visual observations, visible emissions are observed, then the permittee shall resume to perform daily visual observations. If visible emissions from the Process Heaters (BUR-20002 & H-20002) are observed (not including condensed water in the plume), the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:030, Section 10]

c. The permittee shall monitor the exhaust temperature at the inlet for the SCR control at least once per 15 minutes, during all periods of operation. [401 KAR 52:030, Section 10]

d. The permittee shall monitor the ammonia/urea solution flow rate to the SCR on a daily basis. [401 KAR 52:030, Section 10]

e. The permittee shall install, operate, and maintain continuous temperature monitors to measure the combustion temperature within the combustion zones of the Process Heaters (BUR-20002 & H-20002) at all times the emission unit(s) are in operation. [401 KAR 52:030, Section 10]

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of the following on a monthly basis: [401 KAR 52:030, Section 10]
   1) The weight (tons) and type of each plastic processed;
   2) The type (naphtha, diesel, or residue) and amount (gallons) of each product produced;

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

3) The amount of non-condensable process gases produced (MMscf);
4) The amount of natural gas combusted and the amount of process gas combusted in each process heater (BUR-20002 & H-20002) (MMscf);
5) The hours of operation.

b. The permittee shall maintain 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 52:030, Section 10]

c. The permittee shall maintain a log of the qualitative visual observations made as specified in **4. Monitoring Requirements** b. including the date, time, initials of observer, whether any emissions were observed (yes/no), and any U.S. EPA Reference Method 9 readings taken.

d. The permittee shall calculate and maintain records of the 3-hour block average exhaust temperature at the inlet for the SCR. The records shall include any time the inlet temperature was outside of the range identified in the manufacturer's specifications or established in the most recent performance test, once conducted, and any corrective actions taken. During these times, the permittee shall assume a NOx control efficiency of zero percent. [401 KAR 52:030, Section 10]

e. The permittee shall maintain records of the minimum and maximum combustion temperatures within the combustion zones of the Process Heaters (BUR-20002 & H-20002) on a daily basis. The records shall include any time the combustion temperature was outside of the range established in the most recent performance test and any corrective actions taken. During these times, the permittee shall assume a VOC control efficiency of zero percent. [401 KAR 52:030, Section 10]

f. The permittee shall maintain records of the ammonia/urea solution flow rate to the SCR on a daily basis. [401 KAR 52:030, Section 10]

g. The permittee shall maintain records of the manufacturer's recommended procedures for maintenance and catalyst replacement of the SCR. [401 KAR 52:030, Section 10]

6. Specific Reporting Requirements:
Refer to **Section F - Monitoring, Recordkeeping, and Reporting Requirements**.

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

Relief Flare (FL-05001) & Tank Farm Flare (FL-00502)

Description Pilot Fuel Usage: Natural Gas Construction Date: 2025 (Proposed)				
Emission Unit	**Facility ID**	**Heat Capacity of Flare Pilot (MMBtu/hr)**	**Control Efficiency**	**Emissions Controlled**
EP-003	Relief Flare (FL-05001)	0.1	98%	Process Combustion Upset, Startup & Shutdown, Maintenance, 0.52 MMScf/hr (R-20001 & R-20002; BUR-20002 & H-20002)
EP-004	Tank Farm Flare (FL-00502)			Loading Racks (LOAD), Storage Tanks (Table I & II)

APPLICABLE REGULATIONS:
401 KAR 63:015, *Flares*

STATE-ORIGIN REQUIREMENTS:
401 KAR 63:020*, Potentially hazardous matter or toxic substances*

PRECLUDED REGULATIONS:
401 KAR 51:017, *Prevention of significant deterioration of air quality*
401 KAR 52:020, *Title V permits*

1. **Operating Limitations:**
   a. Each flare shall be operated with a flame present at all times that gas is being processed by the facility, consistent with manufacturer's recommendations and standard operating practices. [401 KAR 52:030, Section 10]

   b. The non-condensable process gasses generated by R-20001 and/or R-20002 shall only be combusted by the Relief Flare (EP-003) during periods of startup and shutdown, process upset, and maintenance. At all other times R-20001 and/or R-20002 is in operation, all non-condensable process gasses shall be combusted in the Process Heaters (BUR-20002 & H-20002). [401 KAR 52:030, Section 10]

2. **Emission Limitations:**
   a. The permittee shall not cause, suffer, or allow the emission into the open air of particulate matter from any flare which is greater than twenty (20) percent opacity for more than three (3) minutes in any one (1) day. [401 KAR 63:015, Section 3]
   Compliance Demonstration Method:

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

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

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

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

c. See **Section D - Source Emission Limitations and Testing Requirements**, 3.

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

4. Specific Monitoring Requirements:

a. The permittee shall perform a daily qualitative visual observation of the opacity of emissions from each flare. If after 180 days of daily visual observations there have been no visible emissions observed, then the permittee may reduce visual observations to no less than weekly while the affected facility is combusting any process gas. If during weekly visual observations, visible emissions are observed, then the permittee shall resume to perform daily visual observations. If visible emissions from a flare stack are observed (not including condensed water in the plume), the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:030, Section 10]

b. The permittee shall monitor for the presence of a pilot flame in each flare at least once per shift, when emissions are vented to the flare. [401 KAR 52:030, Section 10]

c. The permittee shall monitor the amount of non-condensable process gasses sent to the Relief Flare (EP-003) on a monthly basis. [401 KAR 52:030, Section 10]

5. Specific Recordkeeping Requirements:

a. The following information shall be recorded and kept in a readily accessible location: [401 KAR 52:030, Section 10]
   1) Schematics, design specifications, and piping and instrumentation diagrams related to vent stream flows to each flare;

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

2) The dates and descriptions of any changes in the design specifications;
3) Records of periods and duration when visible emissions are detected;
4) Records of periods and duration when no pilot flame was present;
5) A daily log of the visible observations shall be kept along with records of any Method 9 testing performed for the flare; and
6) Records of all times that a flare is inoperable and any maintenance performed.

b. The permittee shall maintain records of the amount of non-condensable process gasses sent to the Relief Flare (EP-003) on a monthly basis. [401 KAR 52:030, Section 10]

c. Refer to **Section F - Monitoring, Recordkeeping, and Reporting Requirements.**

6. Specific Reporting Requirements:
Refer to **Section F - Monitoring, Recordkeeping, and Reporting Requirements.**

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

Table I Storage Tanks

Description Tank Orientations: Horizontal Tank Type: Internal Floating Roof Construction Date: 2025 (Proposed)					
Tank ID	**Product**	**Capacity (gallons)**	**Throughput (gallons/yr)**	**Maximum True Vapor Pressure (psia)**	**Control Device**
Tank 12204	Naphtha Product Tank	37,600	9,307,500	5.06	Tank Farm Flare (EP-004) [98% control efficiency]
Tank 12209	Off-Spec Naphtha Tank	37,600	178,500	5.06	

APPLICABLE REGULATIONS:
40 C.F.R. 60.110c to 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*

PRECLUDED REGULATIONS:
401 KAR 51:017, *Prevention of significant deterioration of air quality*
401 KAR 52:020, *Title V permits*

1. **Operating Limitations:**
   a. The permittee shall vent all emissions from the Table I Storage Tanks to the Tank Farm Flare (EP-004). [401 KAR 52:030, Section 10]

      Compliance Demonstration Method:
      Refer to conditions for **EP-004 (Tank Farm Flare (FL-00502))**.

   b. The storage vessels with a capacity greater than or equal to 20,000 gal (75.7 m^3) but less than 40,000 gal (151 m^3) containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 1.5 psia (10.3 kPa), are subject to the standards in 40 CFR 60.112c and the corresponding requirements in 40 CFR 60.113c through 60.116c as new sources. [40 CFR 60.110c(c) & 40 CFR 60.110c(c)(2)]

   c. All standards including emission limitations shall apply at all times, including periods of startup, shutdown and malfunction. As provided in 40 CFR 60.11(f), 40 CFR 60.110c(g) supersedes the exemptions for periods of startup, shutdown, and malfunction in 40 CFR 60, Subpart A. [40 CFR 60.110c(g)]

   d. ***General storage vessel control requirements.*** The permittee must equip and operate each storage vessel affected facility meeting the thresholds in 40 CFR 60.110c(c)(2) as specified in 40 CFR 60.112c(a)(1) through (4), as applicable. [40 CFR 60.112c(a)]

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

1) For each storage vessel affected facility containing a VOL that, as stored, has a maximum true vapor pressure less than 11.1 psia (76.6 kPa), the permittee shall install and operate an internal floating roof meeting the requirements in 40 CFR 60.112c(b). [40 CFR 60.112c(a)(1)]
2) The permittee must meet the applicable testing, monitoring, and inspection requirements specified in 40 CFR 60.113c, recordkeeping requirements specified in 40 CFR 60.115c, and reporting requirements specified in 40 CFR 60.116c. [40 CFR 60.112c(a)(4)]

e. ***Requirements for an internal floating roof.*** The permittee must equip and operate each internal floating roof as specified in 40 CFR 60.112c(b)(1) through (16), as applicable. [40 CFR 60.112c(b)]
   1) The internal floating roof must rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof must be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the roof supports, the process of filling, emptying, or refilling must be continuous and must be accomplished as rapidly as possible. [40 CFR 60.112c(b)(1)]
   2) Except as provided in 40 CFR 60.112c(b)(14), each internal floating roof must be equipped with the following closure devices between the wall of the storage vessel and the edge of the internal floating roof: [40 CFR 60.112c(b)(2)]
      i. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal. Tank owner and address. [40 CFR 60.112c(b)(2)(i)]
      ii. The primary seal must be either a mechanical shoe seal or a liquid-mounted seal. If a mechanical shoe seal is used, it must be installed so that one end of the shoe extends into the stored VOL and the other end extends a minimum vertical distance of 6 inches (15 centimeters) above the stored organic liquid surface. [40 CFR 60.112c(b)(2)(ii)]
      iii. The secondary seal must be rim-mounted. [40 CFR 60.112c(b)(2)(iii)]
   3) Each opening in a noncontact internal floating roof except for vacuum breaker/automatic bleeder vents and the rim vents is to provide a projection below the liquid surface. [40 CFR 60.112c(b)(3)]
   4) Vacuum breaker/automatic bleeder vents must be equipped with a gasket and are to be closed at all times, with no visible gaps, when the roof is floating. Vacuum breaker/automatic bleeder vents must be set to open only when the roof is being floated off or is being landed on the roof supports. [40 CFR 60.112c(b)(4)]
   5) Rim vents must be equipped with a gasket and must be closed at all times with no visible gaps when the roof is floating. Rim vents must be set to open only when the internal floating roof is not floating or when the pressure beneath the rim seal system exceeds the manufacturer's recommended setting. [40 CFR 60.112c(b)(5)]
   6) Each penetration of the internal floating roof for the purpose of sampling must be a gauge hatch/sample well. Except as specified in 40 CFR 60.112c(b)(14), the gauge hatch/sample well must have a gasketed cover, which must be closed at all times,

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

with no visible gaps, except when the hatch or well must be opened for access. [40 CFR 60.112c(b)(6)]

7) Each access hatch and gauge float well must be equipped with a cover that is gasketed and that is bolted or otherwise mechanically secured. The cover must be closed and must be bolted or otherwise mechanically secured at all times, with no visible gaps, except when the hatch or well must be opened for access. [40 CFR 60.112c(b)(7)]
8) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof must have a flexible fabric sleeve seal or a gasketed sliding cover. [40 CFR 60.112c(b)(8)]
9) Each penetration of the internal floating roof that allows for passage of an unslotted leg ladder or unslotted ladder/guidepole combination must have a gasketed sliding cover. The cover must be closed at all times, with no visible gaps, except when the well must be opened for access. [40 CFR 60.112c(b)(9)]
10) Each slotted guidepole must be equipped with one of the controls specified in 40 CFR 60.112c(b)(10)(i) through (v). The covers must be designed to be closed at all times, with no visible gaps, except when the cover must be opened for access. [40 CFR 60.112c(b)(10)]
    i. Gasketed sliding well cover, with pole sleeve. The sleeve must extend into the stored liquid. [40 CFR 60.112c(b)(10)(i)]
    ii. Gasketed sliding well cover, with pole sleeve and pole wiper. The sleeve must extend into the stored liquid. [40 CFR 60.112c(b)(10)(ii)]
    iii. Gasketed sliding well cover, with pole float and pole wiper. The wiper or seal of the pole float must be at or above the height of the pole wiper. [40 CFR 60.112c(b)(10)(iii)]
    iv. Gasketed sliding well cover, with pole float, pole sleeve, and pole wiper. The sleeve must extend into the stored liquid. The wiper or seal of the pole float must be at or above the height of the pole wiper. [40 CFR 60.112c(b)(10)(iv)]
    v. A flexible device that completely encloses the slotted guidepole and eliminates the hydrocarbon vapor emissions pathway from inside the storage vessel through the guidepole slots to the outside air; a gasketed guidepole cover at the top of the guidepole; and a gasketed sliding well cover positioned at the top of the guidepole well that seals any openings between the well cover and the guidepole (e.g., pole wiper), any openings between the well cover and any other objects that pass through the well cover, and any other openings in the top of the guidepole well. [40 CFR 60.112c(b)(10)(v)]
11) Ladder-slotted guidepole combination wells must be equipped with a gasketed sliding well cover and a ladder sleeve. The sliding well cover must be designed to be closed at all times with no visible gaps, except when gauging or sampling. [40 CFR 60.112c(b)(11)]
12) Unslotted guidepoles must be equipped with one of the controls specified in 40 CFR 60.112c(b)(12)(i) or (ii). The controls must be designed to be closed at all times with no visible gaps. [40 CFR 60.112c(b)(12)]
    i. A gasketed guidepole cover at the top of the guidepole; a gasketed sliding well cover; and a pole sleeve. The guidepole cover must be closed at all times, except when required to be opened for access. The gasketed sliding well cover must seal any openings between the well cover and the guidepole, any openings between

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

the well cover and any other objects that pass through the well cover, and any other openings in the top of the guidepole well. [40 CFR 60.112c(b)(12)(i)]

ii. A gasketed guidepole cover at the top of the guidepole; a gasketed sliding well cover; and a pole wiper. The guidepole cover must be closed at all times, except when required to be opened for access. The gasketed sliding well cover must seal any openings between the well cover and the guidepole (e.g., pole wiper), any openings between the well cover and any other objects that pass through the well cover, and any other openings in the top of the guidepole well. [40 CFR 60.112c(b)(12)(ii)]

13) Except for leg sleeves and stub drains, each opening in the internal floating roof not specified in 40 CFR 60.112c(b)(4) through (12), must be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device must be opened for access. The cover or lid must be equipped with a gasket. [40 CFR 60.112c(b)(13)]

14) For each modified storage vessel as specified in 40 CFR 60.110c(d) with an existing internal floating roof, the permittee may elect to comply with the rim seal system requirements in 40 CFR 60.112b(a)(1)(ii) or 40 CFR 60.110b(e) instead of the requirements in 40 CFR 60.112c(b)(2), and the permittee may elect to comply with the gauge hatch/sample well requirements in 40 CFR 60.112b(a)(1)(vii) or 40 CFR 60.110b(e) instead of the requirements in 40 CFR 60.112c(b)(6). [40 CFR 60.112c(b)(14)]

15) A system equivalent to those described in 40 CFR 60.112c(b)(1) though (14), as applicable, as provided in 40 CFR 60.114c. [40 CFR 60.112c(b)(15)]

16) Equip, maintain, and operate each internal floating roof control system to maintain the vapor concentration above the floating roof at or below 25 percent of the lower explosive limit (LEL) on a 5-minute rolling average basis without the use of purge gas. This standard may require additional controls, such as improved seam seals, beyond those specified in 40 CFR 60.112c(b)(1) through (15). Compliance with 40 CFR 60.112c(b)(16) must be determined using the methods in 40 CFR 60.113c(a)(3). Exceeding the LEL is considered an inspection failure under 40 CFR 60.113c(a)(2)(i) and must be remedied as such. Any repairs made must be confirmed effective through re-monitoring of the LEL and meeting the limits in 40 CFR 60.112c(b)(16) within the timeframes specified in 40 CFR 60.113c(a)(2)(i). [40 CFR 60.112c(b)(16)]

2. Emission Limitations:

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

Compliance Demonstration Method:

Based upon the emission rates of toxics and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information

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

submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.

b. See **Section D - Source Emission Limitations and Testing Requirements**, 3.

3. Testing Requirements:

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

4. Specific Monitoring Requirements:

For each storage vessel subject to the provision in 40 CFR 60.112c(a), the permittee must meet the requirements of 40 CFR 60.113c(a) if they installed an internal floating roof. [40 CFR 60.113c]

a. ***Requirements for an internal floating roof.*** After installing the control equipment for an internal floating roof to meet the provisions in 40 CFR 60.112c(b), the permittee must meet the requirements specified in 40 CFR 60.113c(a)(1) through (5). [40 CFR 60.113c(a)]

1) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), and deck fittings prior to filling the storage vessel with VOL. Any of the conditions described in 40 CFR 60.113c(a)(1)(i) through (iii) constitutes inspection failure. The permittee must repair the items before filling the storage vessel. [40 CFR 60.113c(a)(1)]
   i. Holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric; [40 CFR 60.113c(a)(1)(i)]
   ii. Defects in the internal floating roof; or [40 CFR 60.113c(a)(1)(ii)]
   iii. A rim seal or deck fitting control not meeting the applicable requirements in 40 CFR 60.112c(b)(2) through (13). [40 CFR 60.113c(a)(1)(iii)]
2) Inspect the internal floating roof as specified in 40 CFR 60.113c(a)(2)(i) at least once every 12 calendar months after initial fill, and inspect the internal floating roof as specified in 40 CFR 60.113c(a)(2)(ii) each time the storage vessel is emptied and degassed, or at a frequency no greater than every 120 calendar months, whichever occurs first. [40 CFR 60.113c(a)(2)]
   i. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is service), and deck fittings, through openings in the fixed roof and conduct LEL monitoring. Any of the conditions described in 40 CFR 60.113c(a)(2)(i)(A) through (F) constitutes inspection failure. Identification of holes or tears in the rim seal is required only for the seal that is visible from the top of the storage vessel. The permittee must repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in 40 CFR 60.113c(a)(2)(i) cannot be repaired within 45 days and if the storage vessel cannot be emptied within 45 days, the permittee may request a 30-day extension from the Administrator. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the storage vessel will be emptied as soon as possible. [40 CFR 60.113c(a)(2)(i)]
      A) Stored liquid on the floating roof; [40 CFR 60.113c(a)(2)(i)(A)]

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

B) The internal floating roof is not resting on the surface of the VOL inside the storage vessel; [40 CFR 60.113c(a)(2)(i)(B)]
C) Holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric; [40 CFR 60.113c(a)(2)(i)(C)]
D) Defects in the internal floating roof; [40 CFR 60.113c(a)(2)(i)(D)]
E) A rim seal or deck fitting control not meeting the applicable requirements in 40 CFR 60.112c(b)(2) through (13); or [40 CFR 60.113c(a)(2)(i)(E)]
F) The concentration measured according to 40 CFR 60.113c(a)(3) exceeds 25 percent of the LEL. [40 CFR 60.113c(a)(2)(i)(F)]

ii. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes, and sleeve seals (if any). Any of the conditions described in 40 CFR 60.113c(a)(2)(ii)(A) through (C) constitutes an inspection failure. The permittee must repair the items as necessary so that none of the conditions specified in 40 CFR 60.113c(a)(2)(ii) exist before refilling the storage vessel with VOL. The inspection may be performed entirely from the top side of the floating roof, as long as there is visual access to all deck fittings and rim seal system specified in 40 CFR 60.112c(b). The permittee must repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in 40 CFR 60.113c(a)(2)(ii) cannot be repaired within 45 days and if the storage vessel cannot be emptied within 45 days, the permittee may request a 30-day extension from the Administrator. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the storage vessel will be emptied as soon as possible. [40 CFR 60.113c(a)(2)(ii)]
A) Defects in the internal floating roof; [40 CFR 60.113c(a)(2)(ii)(A)]
B) Holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric; or [40 CFR 60.113c(a)(2)(ii)(B)]
C) A rim seal or deck fitting control not meeting the applicable requirements in 40 CFR 60.112c(b)(2) through (13). [40 CFR 60.113c(a)(2)(ii)(C)]

3) Compliance with the LEL limit for internal floating roof storage vessels at 40 CFR 60.112c(b)(16) must be determined based on the procedures specified in 40 CFR 60.113c(a)(3)(i) through (v). If tubing is necessary to obtain the measurements, the tubing must be non-crimping and made of Teflon or other inert material. [40 CFR 60.113c(a)(3)]

i. The permittee must conduct LEL monitoring as part of the annual inspection specified in 40 CFR 60.113c(a)(2)(i) and at other times upon request by the Administrator. If the measurement cannot be performed during the visual inspection due to wind speeds exceeding those specified in 40 CFR 60.113c(a)(3)(iii)(C), the measurement must be performed within 30 days of the visual inspection. If there is an exceedance of the LEL limit, the permittee must re-monitor in accordance with 40 CFR 60.112c(b)(16) within 30 days after repair or placing the storage vessel back in service. [40 CFR 60.113c(a)(3)(i)]
ii. The calibration of the LEL meter must be checked per manufacturer specifications immediately before and after the measurements as specified in 40 CFR 60.113c(a)(3)(ii)(A) and (B). If tubing will be used for the measurements,

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

the tubing must be attached during calibration so that the calibration gas travels through the entire measurement system. [40 CFR 60.113c(a)(3)(ii)]

A) Conduct the span check using a calibration gas recommended by the LEL meter manufacturer. The calibration gas must contain a single hydrocarbon at a concentration of the vapor corresponding to 50 percent of the LEL (e.g., 2.50 percent by volume when using methane as the calibration gas). The vendor must provide a Certificate of Analysis for the gas, and the certified concentration must be within ±2 percent (e.g., 2.45 percent-2.55 percent by volume when using methane as the calibration gas). The LEL span response must be between 49 percent and 51 percent. If the span check prior to the measurements does not meet this requirement, the LEL meter must be recalibrated or replaced. If the span check after the measurements does not meet this requirement, the LEL meter must be recalibrated or replaced, and the measurements must be repeated. The internal floating roof is not resting on the surface of the VOL inside the storage vessel; [40 CFR 60.113c(a)(3)(ii)(A)]

B) Check the instrumental offset response using a certified compressed gas cylinder of zero air or an ambient environment that is free of organic compounds. The pre-measurement instrumental offset response must be 0 percent LEL. If the LEL meter does not meet this requirement, the LEL meter must be recalibrated or replaced. [40 CFR 60.113c(a)(3)(ii)(B)]

iii. Conduct the monitoring measurements as specified in 40 CFR 60.113c(a)(3)(iii)(A) through (D). [40 CFR 60.113c(a)(3)(iii)]

A) Measurements of the vapors within the internal floating roof storage vessel must be collected no more than 3 feet above the internal floating roof. [40 CFR 60.113c(a)(3)(iii)(A)]

B) Measurements must be taken for a minimum of 20 minutes, logging the measurements at least once every 15 seconds, or until one 5-minute average as determined according to 40 CFR 60.113c(a)(3)(v)(B) exceeds the limit specified in 40 CFR 60.112c(b)(16). [40 CFR 60.113c(a)(3)(iii)(B)]

C) Measurements shall be taken when the wind speed at the top of the storage vessel is 5 mph or less to the extent practicable, but in no case shall measurements be taken when the sustained wind speed at top of storage vessel is greater than the annual average wind speed at the site or 15 mph, whichever is less. [40 CFR 60.113c(a)(3)(iii)(C)]

D) Measurements should be conducted when the internal floating roof is floating with limited product movement (limited filling or emptying of the storage vessel). [40 CFR 60.113c(a)(3)(iii)(D)]

iv. To determine the actual concentration of the vapor within the storage vessel, the percent of the LEL “as the calibration gas” must be corrected according to one of the procedures in 40 CFR 60.113c(a)(3)(iv)(A) or (B). Alternatively, if the LEL meter used has correction factors that can be selected from the meter's program, the permittee may enable this feature to automatically apply one of the correction factors in 40 CFR 60.113c(a)(3)(iv)(A) or (B). [40 CFR 60.113c(a)(3)(iv)]

A) Multiply the measurement by the published vapor correction factor for the specific LEL meter, stored VOL, and calibration gas used; or [40 CFR 60.113c(a)(3)(iv)(A)]

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

B) If there is no published correction factor for the specific LEL meter used and the vapors of the stored VOL, multiply the measurement by the published correction factor for butane as a surrogate for determining the LEL of the vapors of the stored VOL. The correction factor must correspond to the calibration gas used. [40 CFR 60.113c(a)(3)(iv)(B)]

v. Use the calculation procedures in 40 CFR 60.113c(a)(3)(v)(A) through (C) to determine compliance with the LEL limit. [40 CFR 60.113c(a)(3)(v)]

A) For each minute while measurements are being taken, determine the 1-minute average reading as the arithmetic average of the corrected individual measurements (taken at least once every 15 seconds) during the minute. [40 CFR 60.113c(a)(3)(v)(A)]

B) Starting with the end of the fifth minute of data, calculate a 5-minute rolling average as the arithmetic average of the previous five 1-minute readings determined under 40 CFR 60.113c(a)(3)(v)(A). Determine a new 5-minute average reading for every subsequent 1-minute reading. [40 CFR 60.113c(a)(3)(v)(B)]

C) Each 5-minute rolling average must meet the LEL limit specified in 40 CFR 60.112c(b)(16). [40 CFR 60.113c(a)(3)(v)(C)]

4) Notify the Administrator as specified in 40 CFR 60.116c(b) at least 30 days prior to the inspection of each storage vessel for which an inspection is required by 40 CFR 60.113c(a)(1) or (a)(2)(ii) to afford the Administrator the opportunity to have an observer present. [40 CFR 60.113c(a)(4)]

5) The permittee must equip each affected storage vessel that has an internal floating roof with an alarm system that provides a visual or audible signal that alerts the operator when the internal floating roof is approaching the landed height and that provides a separate visual or audible signal to alert the operator when the roof has landed. The roof is considered landed when the floating roof first rests on supports or when the vacuum breaker/automatic bleeder vent begins to open, whichever is first (for example, when using a leg-actuated vent that triggers the vent prior to resting on the roof supports). [40 CFR 60.113c(a)(5)]

b. ***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 60.113c(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)]

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

ii. ASTM D6377-20 (incorporated by reference; see 40 CFR 60.17). 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 (incorporated by reference; see 40 CFR 60.17). 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)]

2) For each affected storage vessel storing a mixture of indeterminate composition or a mixture of unknown variable composition, the initial determination of the vapor pressure required by 40 CFR 60.113c(d)(1) must be a physical test using one of the methods specified in 40 CFR 60.113c(d)(1)(ii) through (iv). Additional physical tests using one of the methods specified in 40 CFR 60.113c(d)(1)(ii) through (iv) are required at least once every 6 calendar months thereafter as long as the measured vapor pressure remains below the applicable thresholds in 40 CFR 60.110c(c)(1), (c)(2), (d)(1), or (d)(2). If the vapor pressure measured under 40 CFR 60.113c(d)(2) exceeds the threshold defined in 40 CFR 60.110c(c)(1), (c)(2), (d)(1), or (d)(2), the permittee must meet the requirements in 40 CFR 60.112c and the corresponding requirements in 40 CFR 60.113c through 60.116c. If the storage vessel does not have controls meeting the requirements in 40 CFR 60.112c, the storage vessel must be emptied and taken out of service until controls meeting the requirements in 40 CFR 60.112c can be installed. Upon compliance with the provisions in 40 CFR 60.112c, no additional vapor pressure monitoring is required. [40 CFR 60.113c(d)(2)]

c. The permittee shall monitor the throughput (in gallons) for the tanks on a monthly basis. [401 KAR 52:030, Section 10]

5. Specific Recordkeeping Requirements:

a. Except as otherwise specified in 40 CFR 60.115c(b) through (d), the permittee must keep copies of all records required by 40 CFR 60.115c and all reports required under 40 CFR 60.116c for at least 5 years. [40 CFR 60.115c(a)]

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. Except as provided in 40 CFR 60.115c(c)(1), for each storage vessel affected facility under 40 CFR 60, Subpart Kc, the permittee must maintain a record of the VOL currently stored, including a description of the VOL stored, the date when the VOL was first stored in the storage vessel, and the maximum true vapor pressure of that VOL. [40 CFR 60.115c(c)]

1) For each vessel storing a mixture of indeterminate or variable composition that meets the requirements for vapor pressure measurement at least once every 6 calendar months in 40 CFR 60.113c(d), the permittee must maintain records of each vapor pressure measurement for 5 years. [40 CFR 60.115c(c)(1)]

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

d. For each storage vessel as specified in 40 CFR 60.112c(a), the permittee must keep records as required in 40 CFR 60.115c(d)(1) through (5), as applicable depending upon the control equipment installed to meet the requirements of 40 CFR 60.112c. [40 CFR 60.115c(d)]
   1) After installing control equipment for an internal floating roof to meet the provisions in 40 CFR 60.112c(b), the permittee must keep the following records. [40 CFR 60.115c(d)(1)]
      i. Keep a record of each inspection performed as required by 40 CFR 60.113c(a)(1), (a)(2)(i), and (a)(2)(ii). Each record must identify the storage vessel on which the inspection was performed and must contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115c(d)(1)(i)]
      ii. For each LEL monitoring event, keep records as specified in 40 CFR 60.115c(d)(1)(ii)(A) through (I).[40 CFR 60.115c(d)(1)(ii)]
         A) Date and time of the LEL monitoring, and the storage vessel being monitored. [40 CFR 60.115c(d)(1)(ii)(A)]
         B) A description of the monitoring event (annual monitoring conducted concurrent with visual inspection required under 40 CFR 60.113c(a)(2)(i); re-monitoring due to high winds during annual monitoring; re-monitoring after repair attempt; other monitoring event as required by the Administrator). [40 CFR 60.115c(d)(1)(ii)(B)]
         C) Wind speed at the top of the storage vessel on the date of LEL monitoring. [40 CFR 60.115c(d)(1)(ii)(C)]
         D) The LEL meter manufacturer and model number used, as well as an indication of whether tubing was used during the LEL monitoring, and if so, the type and length of tubing used. [40 CFR 60.115c(d)(1)(ii)(D)]
         E) Calibration checks conducted before and after making the measurements, including both the span check and instrumental offset. This includes the hydrocarbon used as the calibration gas, the Certificate of Analysis for the calibration gas(es), the results of the calibration check, and any corrective action for calibration checks that do not meet the required response. [40 CFR 60.115c(d)(1)(ii)(E)]
         F) Location of the measurements and the location of the floating roof. [40 CFR 60.115c(d)(1)(ii)(F)]
         G) Each measurement (taken at least once every 15 seconds). The records should indicate whether the recorded values were automatically corrected using the meter's programming. If the values were not automatically corrected, record both the raw (as the calibration gas) and corrected measurements, as well as the correction factor used. [40 CFR 60.115c(d)(1)(ii)(G)]
         H) Each of the 5-minute rolling average readings. [40 CFR 60.115c(d)(1)(ii)(H)]
         I) If the vapor concentration of the storage vessel was above 25 percent of the LEL on a 5-minute rolling average basis, a description of whether the floating roof was repaired, replaced, or taken out of service. [40 CFR 60.115c(d)(1)(ii)(I)]

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

e. The permittee shall maintain records of product stored within the tanks along with respective Maximum True Vapor Pressure (in Psia) on a monthly basis. [401 KAR 52:030, Section 10]

f. The permittee shall maintain records of product throughput (in gallons) for each tank on a monthly basis. [401 KAR 52:030, Section 10]

6. Specific Reporting Requirements:

a. ***Initial notification requirements.*** The permittee must submit initial notifications to the Administrator within 60 days after October 15, 2024 or within 60 days after becoming an affected storage vessel, whichever is later. Once the report template for 40 CFR 60, Subpart Kc has been available on the Compliance and Emissions Data Reporting Interface (CEDRI) website (https://www.epa.gov/electronic-reporting-air-emissions/cedri) for 1 year, the permittee must submit all subsequent initial notifications using the appropriate electronic report template on the CEDRI website for 40 CFR 60, Subpart Kc and following the procedure specified in 40 CFR 60.116c(f). The date report templates become available will be listed on the CEDRI website. For each storage vessel affected facility subject to the standards in 40 CFR 60.112c, include the following information in the initial notification: [40 CFR 60.116c(a)]

1) The following general facility information: [40 CFR 60.116c(a)(1)]
   i. For Facility name;
   ii. Facility physical address, including city, county, State, and zip code;
   iii. Latitude and longitude of facility's physical location. Coordinates must be in decimal degrees with at least five decimal places; and
   iv. The following information for the facility contact person:
      A) Name;
      B) Mailing address, including city, county, State, and zip code;
      C) Telephone number; and
      D) Email address.
2) Identification of the storage vessel(s) subject to 40 CFR 60, Subpart Kc. [40 CFR 60.116c(a)(2)]
3) Capacity (in gallons) of each storage vessel. [40 CFR 60.116c(a)(3)]
4) Maximum true vapor pressure of the liquid stored (in psia) in each storage vessel. [40 CFR 60.116c(a)(4)]
5) Indication of the standards for which the storage vessel complies {40 CFR 60.112c(b); 60.112c(c); 60.112c(d); 60.112c(e)}. [40 CFR 60.116c(a)(5)]
6) If the permittee routes emissions to a control device, the permittee must specify the design of the storage vessel and closed vent system (i.e., storage vessel designed according to 40 CFR 60.112c(d)(1)(i); or closed vent system designed according to 40 CFR 60.112c(d)(1)(ii)), the type of control device (i.e., enclosed combustion device complying with temperature operating limit; enclosed combustion device electing to comply with 40 CFR 60.112c(d)(5); process heater or boiler; catalytic incinerator; flare, or other control device (specify)). [40 CFR 60.116c(a)(6)]

b. ***Other notifications.*** Submit notifications for filling and refilling an affected storage vessel and for conducting gap measurements as specified in 40 CFR 60.116c(b)(1) and (2). [40 CFR 60.116c(b)]

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

1) As specified in 40 CFR 60.113c(a)(4) and (b)(7)(ii), the permittee must notify the Administrator at least 30 days prior to inspection of each storage vessel for which an inspection is required by 40 CFR 60.113c(a)(1), (a)(2)(ii) or (b)(7) to afford the Administrator the opportunity to have an observer present. Submit the notification using CEDRI as specified in 40 CFR 60.116c(f). If the inspection required by 40 CFR 60.113c(a)(2)(ii) or (b)(7) is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the storage vessel, the permittee must notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation using CEDRI demonstrating why the inspection was unplanned. [40 CFR 60.116c(b)(1)]
2) As specified in 40 CFR 60.113c(b)(6), the permittee must notify the Administrator 30 days in advance of any gap measurements required by 40 CFR 60.113c(b)(1) to afford the Administrator the opportunity to have an observer present. Submit the notification using CEDRI as specified in 40 CFR 60.116c(f). If the inspection required by 40 CFR 60.113c(b)(1) is not planned and you could not have known about the inspection 30 days in advance of the gap measurement, you must notify the Administrator at least 7 days prior to the conducting the gap measurement. Notification must be made by telephone immediately followed by written documentation using CEDRI demonstrating why the gap measurement was unplanned. [40 CFR 60.116c(b)(2)]

c. ***Reporting requirements for semiannual report.*** The permittee must submit to the Administrator semiannual reports with the applicable information in 40 CFR 60.116c(c)(1) through (12) by the dates specified in 40 CFR 60.116c(d). For 40 CFR 60, Subpart Kc, the semiannual reports supersede the excess emissions and monitoring systems performance report and/or summary report form required under 40 CFR 60.7. Once the report template for 40 CFR 60, Subpart Kc has been available on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/cedri) for 1 year, the permittee must submit all subsequent reports using the appropriate electronic report template on the CEDRI website for 40 CFR 60, Subpart Kc and following the procedure specified in 40 CFR 60.116c(f). 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 Kc, regardless of the method in which the report is submitted. [40 CFR 60.116c(c)]
   1) Report the following general facility information: [40 CFR 60.116c(c)(1)]
      i. Facility name;
      ii. Facility physical address, including city, county, and State;
      iii. Latitude and longitude of facility's physical location. Coordinates must be in decimal degrees with at least five decimal places;
      iv. The following information for the facility contact person:
         A) Name;
         B) Mailing address;
         C) Telephone number; and
         D) Email address.

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

v. Date of report and beginning and ending dates of the reporting period. The permittee is no longer required to provide the date of report when the report is submitted via CEDRI; and

vi. Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. If your report is submitted via CEDRI, the certifier's electronic signature during the submission process replaces the requirement in 40 CFR 60.116c(c)(1)(vi).

2) For storage vessels complying with the provisions of 40 CFR 60.112c(b). [40 CFR 60.116c(c)(2)]
   i. Identification of the storage vessel and an indication of whether you comply with 40 CFR 60.112c(b).
   ii. An indication whether the storage vessel was inspected during the reporting period, and if so, the date and type of each inspection conducted during the reporting period [the type of inspection shall be selected from the following list: initial IFR inspection according to 40 CFR 60.113c(a)(1), IFR visual inspection from fixed roof according to 40 CFR 60.113c(a)(2)(i), combined IFR visual inspection with LEL monitoring according to 40 CFR 60.113c(a)(2)(i) and (3), internal IFR inspection according to 40 CFR 60.113c(a)(2)(ii), IFR LEL monitoring according to 40 CFR 60.113c(a)(3).
   iii. For storage vessels complying with the provisions of 40 CFR 60.112c(b) that were not inspected according to 40 CFR 60.113c(a)(2)(ii) during the reporting period, report the last date the storage vessel was inspected according to the provisions in 40 CFR 60.113c(a)(2)(ii).
3) For each failure of a visual inspection required under 40 CFR 60.113c(a)(2)(i), report the information in 40 CFR 60.116c(c)(3)(i) through (iii). For each failure of LEL monitoring required under 40 CFR 60.113c(a)(3), report the information in 40 CFR 60.116c(c)(3)(i) through (iv). [40 CFR 60.116c(c)(3)]
   i. Identification of the storage vessel;
   ii. The date of the inspection;
   iii. The nature of the defects; and
   iv. The following information regarding the LEL monitoring conducted:
      A) Date and start and end times of the LEL monitoring conducted.
      B) Wind speed in miles per hour at the top of the storage vessel on the date of LEL monitoring.
      C) The highest 5-minute rolling average reading during the monitoring event.
      D) If re-monitoring was required due to excessive wind or repair during the visual inspection, report the information in 40 CFR 60.116c(b)(3)(iv)(A) through (C) for the re-monitoring event.
      E) Whether the floating roof was repaired, replaced, or taken out of VOL service. If the storage vessel was taken out of VOL service, report the date the storage vessel was emptied. If the floating roof was replaced or repaired, report the nature of and date the repair was made and the information in 40 CFR 60.116c(b)(3)(iv)(A) through (C) for each re-monitoring conducted to confirm the repair.
4) For each inspection required by 40 CFR 60.113c(a)(2)(ii) that finds holes or tears in the seal or seal fabric, defects in the internal floating roof, or other control equipment defects listed in 40 CFR 60.113c(a)(2)(ii), report: [40 CFR 60.116c(c)(4)]

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

i. Identification of the storage vessel and date of inspection;
ii. The reason it did not meet the specifications of 40 CFR 60.112c(b) or 40 CFR 60.113c(a)(2)(ii);
iii. A description of each repair made; and
iv. Date of repair.

5) For each landing of an internal floating roof that triggers an alarm required by 40 CFR 60.113c(a)(5), report: [40 CFR 60.116c(c)(7)]
i. Identification of the storage vessel;
ii. Date the roof was landed; and
iii. Indication of whether the roof landed because the storage vessel was being emptied.

d. ***Timeframe for semiannual report submissions.*** [40 CFR 60.116c(d)]
1) The first semiannual report will cover the period starting with the date the source first becomes an affected facility subject to this subpart and ending June 30 or December 31, whichever date is earlier. For example, if the source becomes an affected facility on April 15, the first semiannual report would cover the period from April 15 to June 30. The first semiannual report must be submitted on or before the last day of the month 2 months after the last date covered by the semiannual report. In this example, the first semiannual report would be due August 31. [40 CFR 60.116c(d)(1)]
2) Subsequent semiannual reports will cover subsequent 6 calendar month periods (January 1 through June 30 or July 1 through December 31, as applicable) with each report due on or before the last day of the month 2 months after the last date covered by the semiannual report (August 31 or February 28 or 29, as applicable). [40 CFR 60.116c(d)(2)]
3) For each affected facility that is subject to permitting regulations pursuant to 40 CFR parts 70 or 71, if the delegated authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent semiannual reports according to the dates the delegated authority has established instead of the dates in 40 CFR 60.116c(d)(1) and (2). [40 CFR 60.116c(d)(3)]

e. ***Reporting requirements for performance tests.*** Within 60 days after the date of completing each performance test, the permittee must submit the results following the procedures specified in 40 CFR 60.116c(f). Data collected using test methods that are supported by the U.S. Environmental Protection Agency (EPA) Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (https://www.epa.gov/electronic-reporting-air-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 60.116c(e)]

f. ***Requirements for electronically submitting reports.*** If you are required to submit notifications or reports following the procedures specified in 40 CFR 60.116c(f), you

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

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 you. Do not use CEDRI to submit information you claim as confidential business information (CBI). Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information in the report, you must submit a complete file in the format specified in 40 CFR 60, Subpart KC, including information claimed to be CBI, to the EPA following the procedures in 40 CFR 60.116c(f)(1) and (2). Clearly mark the part or all of the information that you claim 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 are 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. You 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 60.116c(f). [40 CFR 60.116c(f)]

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 Measurement Policy Group Leader and all other files should be flagged to the attention of the NSPS Kc Rule Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email oaqpscbi@epa.gov to request a file transfer link. [40 CFR 60.116c(f)(1)]
2) If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: U.S. EPA, Attn: OAQPS Document Control Officer, Mail Drop: C404-02, 109 T.W. Alexander Drive, P.O. Box 12055, RTP, NC 27711. ERT files should be sent to the secondary attention of the Measurement Policy Group Leader and all other files should be sent to the secondary attention of the NSPS Kc Rule Lead. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope. [40 CFR 60.116c(f)(2)]

g. ***Claims of EPA system outage.*** If you are required to electronically submit a report through CEDRI in the EPA's CDX, you 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, you must meet the requirements outlined in 40 CFR 60.116c(g)(1) through (7). [40 CFR 60.116c(g)]
   1) You 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 60.116c(g)(1)]
   2) The outage must have occurred within the period of time beginning 5 business days prior to the date that the submission is due. [40 CFR 60.116c(g)(2)]

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

3) The outage may be planned or unplanned. [40 CFR 60.116c(g)(3)]
4) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting. [40 CFR 60.116c(g)(4)]
5) You must provide to the Administrator a written description identifying: [40 CFR 60.116c(g)(5)]
   i. The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable; [40 CFR 60.116c(g)(5)(i)]
   ii. A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage; [40 CFR 60.116c(g)(5)(ii)]
   iii. A description of measures taken or to be taken to minimize the delay in reporting; and [40 CFR 60.116c(g)(5)(iii)]
   iv. The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. [40 CFR 60.116c(g)(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 60.116c(g)(6)]
7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. [40 CFR 60.116c(g)(7)]

h. ***Claims of force majeure.*** If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with that reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in 40 CFR 60.116c(h)(1) through (5). [40 CFR 60.116c(h)]
   1) You 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 5 business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you 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 60.116c(h)(1)]
   2) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting. [40 CFR 60.116c(h)(2)]
   3) You must provide to the Administrator: [40 CFR 60.116c(h)(3)]
      i. A written description of the force majeure event; [40 CFR 60.116c(h)(3)(i)]
      ii. A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; [40 CFR 60.116c(h)(3)(ii)]
      iii. A description of measures taken or to be taken to minimize the delay in reporting; and[40 CFR 60.116c(h)(3)(iii)]

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

iv. The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. [40 CFR 60.116c(h)(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 60.116c(h)(4)]

5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. [40 CFR 60.116c(h)(5)]

i. Refer to **Section F - Monitoring, Recordkeeping, and Reporting Requirements**.

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

Table II Storage Tanks

Description Tank Orientations: Horizontal Tank Type: Fixed Roof Construction Date: 2025 (Proposed)					
Tank ID	**Product**	**Capacity (gallons)**	**Throughput (gallons/yr)**	**Maximum True Vapor Pressure (psia)**	**Control Device**
Tank 12203-A	Naphtha Product Day Tank A	15,220	9,307,500	5.06	Tank Farm Flare (EP-004) [98% control efficiency]
Tank 12203-B	Naphtha Product Day Tank B	15,220	9,307,500	5.06	
Tank 12205-A	Diesel Product Day Tank A	73,430	9,307,500	0.0115	
Tank 12205-B	Diesel Product Day Tank B	73,430	9,307,500	0.0115	
Tank 12206	Diesel Product Tank	709,460	9,307,500	0.0115	
Tank 12208	Residue Product Tank	527,920	2,190,000	0.0000931	
Tank 12210	Off-Spec Diesel Tank	190,160	178,500	0.0115	

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

PRECLUDED REGULATIONS:
401 KAR 51:017, *Prevention of significant deterioration of air quality*
401 KAR 52:020, *Title V permits*

1. **Operating Limitations:**
   The permittee shall vent all emissions from the Table II Storage Tanks to the Tank Farm Flare (EP-004). [401 KAR 52:030, Section 10]

   Compliance Demonstration Method:
   Refer to conditions for **EP-004 (Tank Farm Flare (FL-00502))**.

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

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. See **Section D - Source Emission Limitations and Testing Requirements**, 3.

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

4. Specific Monitoring Requirements:
The permittee shall monitor the throughput (in gallons) for each tank on a monthly basis. [401 KAR 52:030, Section 10]

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of product stored within the tanks along with respective Maximum True Vapor Pressure (in Psia) on a monthly basis. [401 KAR 52:030, Section 10]

b. The permittee shall maintain records of product throughput (in gallons) for each tank on a monthly basis. [401 KAR 52:030, Section 10]

6. Specific Reporting Requirements:
Refer to **Section F - Monitoring, Recordkeeping, and Reporting Requirements**.

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

Loading Racks (LOAD) and Barge Loadout (EP-017)

Description						
Point	**Product Loaded**	**Loading Modes**	**Throughput (gallons/day)**	**Throughput (gallons/yr)**	**Installation Date**	**Control Device**
LOAD (1)	Naphtha	Truck, Rail	25,500	9,307,500	2025 (Proposed)	Tank Farm Flare (EP-004) [98% control efficiency]
LOAD (2)	Diesel	Truck, Rail	25,500	9,307,500		
LOAD (3)	Residue (Fuel Oil)	Truck	6,000	2,190,000		
EP-017	Diesel	Barge	25,500	9,307,500		None

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

PRECLUDED REGULATIONS:
401 KAR 51:017, *Prevention of significant deterioration of air quality*
401 KAR 52:020, *Title V permits*

1. **Operating Limitations:**
   The permittee shall vent all emissions from the product loading activities to the Tank Farm Flare (EP-004), with the exception of the Barge Loadout (EP-017). [401 KAR 52:030, Section 10]

   Compliance Demonstration Method:
   Refer to conditions for **EP-004 (Tank Farm Flare (FL-00502))**.

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

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

   b. See **Section D - Source Emission Limitations and Testing Requirements**, 3.

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

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

4. **Specific Monitoring Requirements:**
   The permittee shall monitor the throughput (in gallons) for each loading process on a monthly basis. [401 KAR 52:030, Section 10]

5. **Specific Recordkeeping Requirements:**
   The permittee shall maintain records of throughput (in gallons) for each loading process on a monthly basis. [401 KAR 52:030, Section 10]

6. **Specific Reporting Requirements:**
   Refer to **Section F - Monitoring, Recordkeeping, and Reporting Requirements**.

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

Fugitive Piping Components (FUG)

Description			
Piping Component	**Component Count**	**Service Type**	**Date of Construction**
Valves	30	Light Liquid	2025 (Proposed)
Pump Seals	45	Light Liquid	
Connectors & Flanges	2297	All	

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

1. **Operating Limitations:**
   None

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

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

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

4. **Specific Monitoring Requirements:**
   None

5. **Specific Recordkeeping Requirements:**
   a. The permittee shall maintain records of the number of piping components (valves, pump seals, and connectors & flanges) at the facility. [401 KAR 52:030, Section 10]

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

b. The permittee shall maintain records of service type of the piping components (valves, pump seals, and connectors & flanges) at the facility. [401 KAR 52:030, Section 10]

6. Specific Reporting Requirements:
Refer to **Section F - Monitoring, Recordkeeping, and Reporting Requirements**.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

Description	Generally Applicable Regulation
None	

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Hydrogen Sulfide (H_2S), Nitrogen Oxides (NOx), Particulate Matter (PM), Sulfur Dioxide (SO_2) and Volatile Organic Compounds (VOC) emissions measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

3. To preclude the applicability of 401 KAR 52:020 *Title V permits* (for NOx and VOC) and 401 KAR 51:017, *Prevention of significant deterioration of air quality* (for *VOC)*, total source wide actual emissions of NOx and VOC shall not exceed 90 tons per year, each, on a consecutive twelve-month rolling total basis. The twelve-month rolling total shall be calculated by adding monthly emissions to the previous eleven months' emissions.

Compliance Demonstration Method (continued):

Compliance shall be demonstrated by calculating the pollutant specific monthly emissions using the following formula for each pollutant:

$$Pollutant\ Emissions\left(\frac{tons}{month}\right) = \sum\left(\frac{EF \times P}{2000\ \frac{lb}{ton}} \times (1 - Control\ Efficiency)\right)$$

Where EF is the emission factor of each pollutant in the table below until unit specific values have been established during the most recent performance test, once conducted, P is the monthly processing rate of each unit, 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.

Emission Unit (Process ID)	Process Name	Control Efficiency[1.]	EF_{NOx}[1.] (lb/MMscf)[1.]	EF_{VOC}[1.] (lb/MMscf)
EP-003 (1)	Relief Flare Pilot	N/A	100	5.5
EP-003 (2)	Startup/Shutdown	N/A	65.38	5.6[2.]
EP-003 (3)	Process Upset	N/A	31.66	5.6[2.]
EP-003 (4)	Maintenance Activities	N/A	65.38	5.6[2.]
EP-004 (1)	Tank Flare Pilot	N/A	100	5.5
B20002 (1)	Natural Gas	N/A	100	5.5
B20002 (2)	Process Gas	95% for NOx 98% for VOC	2633.3	5,485.8
H20002 (1)	Natural Gas	N/A	100	5.5
H20002 (2)	Process Gas	95% for NOx 98% for VOC	2633.3	5,485.8

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

Emission Unit (Process ID)	Process Name	Control Efficiency[1.]	EF_{NOx}[1.] (lb/1000 gallons)	EF_{VOC}[1.] (lb/1000 gallons)
12203A (1)	Total Losses	98%	N/A	0.0272
12203B (1)	Total Losses	98%	N/A	0.0272
12204 (1)	Total Losses	98%	N/A	0.588
12205A (1)	Total Losses	98%	N/A	0.239
12205B (1)	Total Losses	98%	N/A	0.239
12206 (1)	Total Losses	98%	N/A	0.913
12208 (1)	Total Losses	98%	N/A	0.228
12209 (1)	Total Losses	98%	N/A	0.701
12210 (1)	Total Losses	98%	N/A	2.35
LOAD (1)	Naphta Loading	98%	N/A	11.55
LOAD (2)	Diesel Loading	98%	N/A	0.050
LOAD (3)	Residue Loading	98%	N/A	0.0006
EP-017	Barge Loadout	N/A	N/A	0.0173

1. Control efficiency and the emission factors in the table above, shall be used until unit specific values have been established through a Division approved performance test, if applicable; at which time the permittee shall use the values from testing.
2. The facility shall use a VOC EF of 5,485.8 lb/MMscf for EP-003 anytime process gas is being sent to EP-003 with an assumed control efficiency of 98% from flaring.

The permittee shall maintain records of the monthly and twelve-month rolling total for both NOx and VOC emissions. The twelve-month rolling total emissions shall be reported for each semiannual period in accordance with **Section F – Monitoring, Recordkeeping, and Reporting Requirements**, item 5.

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 Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 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 [401 KAR 52:030, Section 3(1)(f)1a, and Section 1a-7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

3. In accordance with the requirements of 401 KAR 52:030, Section 3(1)f, 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 Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030, Section 22. If continuous

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

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 Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, 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 52:030, 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 in accordance with the following requirements:
   a. Identification of each term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period.
   e. For an emissions unit that was still under construction or which has not commenced

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

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 Division for Air Quality, Paducah Regional Office, 130 Eagle Nest Drive, Paducah, KY 42003.

10. In accordance with 401 KAR 52:030, Section 3(1)(d), 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. If a KYEIS emissions survey is not mailed to the permittee, then the permittee shall comply with all other emissions reporting requirements in this permit.

11. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
    a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
        (1) The size and location of both the original and replacement units; and
        (2) Any resulting change in emissions;
    b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
    c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
    d. The replacement unit shall comply with all applicable requirements; and
    e. The source shall notify Regional office of all shutdowns and start-ups.
    f. Within six (6) months after installing the replacement unit, the owner or operator shall:
        (1) Re-install the original unit and remove or dismantle the replacement unit; or
        (2) Submit an application to permit the replacement unit as a permanent change.

SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

   a. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030, 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 the termination, revocation and reissuance, revision, or denial of a permit [Section 1a-2 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, 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-5 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

   c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030, Section 18. 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 52:030, 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.

      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- 6 and 7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

   e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030, 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 52:030, 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-11 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, 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-3 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, 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-12 of the Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources incorporated by reference in 401 KAR 52:030, 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-9 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, 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 52:030, Section 11(3)].

l. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, 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.

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.

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 52:030, 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 52:030, Section 12].

b. The authority to operate granted through this permit 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 52:030, Section 8(2)].

3. Permit Revisions

a. Minor permit revision procedures specified in 401 KAR 52:030, Section 14(3), 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 52:030, 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 EP-001

SECTION G - GENERAL PROVISIONS (CONTINUED)

(Cooling Tower), HaulRD (Haul Roads), EP-003 (Relief Flare), EP-004 (Tank Farm Flare), Material Handling Emission Points, R-20001 & R-20002 (Primary Reactor & Secondary Reactor), B20002 (Secondary Reactor Burner (BUR-20002)), H20002 (Secondary Reactor Heater (H-20002)), Tank 12203-A (Naphtha Product Day Tank A), Tank 12203-B (Naphtha Product Day Tank B), Tank 12204 (Naphtha Product Tank), Tank 12205-A (Diesel Product Day Tank A), Tank 12205-B (Diesel Product Day Tank B), Tank 12206 (Diesel Product Tank), Tank 12208 (Residue Product Tank), Tank 12209 (Off-Spec Naphtha Tank), Tank 12210 (Off-Spec Diesel Tank), LOAD & EP-017 (Loading Racks & Barge Loadout), and FUG (Fugitive Equipment Leaks) in accordance with the terms and conditions of this permit (F-25-019).

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 52:030, 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. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the **final** permit. 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 52:030, 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

SECTION G - GENERAL PROVISIONS (CONTINUED)

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.

5. Testing Requirements

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

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

c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

7. Emergency Provisions

a. Pursuant to 401 KAR 52:030, Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other 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,

SECTION G - GENERAL PROVISIONS (CONTINUED)

(4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
(5) Notification of the Division does not relieve the source of any other local, state or federal notification requirements.

b. Emergency conditions listed in General Provision G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030, Section 23(3)].

c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030, Section 23(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 82.166.
(5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
(6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

9. Risk Management Provisions

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

SECTION G - GENERAL PROVISIONS (CONTINUED)

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

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None