

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

Draft

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

Permittee Name: ANR Pipeline Company
Mailing Address: 700 Louisiana Street, Suite 700
Houston, TX 77002

Source Name: Madisonville Compressor Station
Mailing Address: 700 Louisiana Street, Suite 700
Houston, TX 77002

Source Location: 7500 Nebo Road, Madisonville, KY 42431

Permit ID: V-26-018
Agency Interest #: 44049
Activity ID: APE20250001
Review Type: Title V, Operating
Source ID: 21-107-00134

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

County: Hopkins

**Application
Complete Date:** November 24, 2025
Issuance Date:
Expiration Date:


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

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Permit	Permit Type	Activity #	Complete Date	Issuance Date	Summary of Action
V-26-018	Renewal	APE20250001	11/24/2025		Permit Renewal Incorporation of 40 CFR 60 Subpart OOOOa requirements for EU FUG and 401 KAR 59:185 for EU CC#1

SECTION A - PERMIT AUTHORIZATION

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

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

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

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

Emission Unit 011 (711), Solar Mars 100 Compressor Turbine [Facility ID 710]

Description:

Model: Solar Mars 100-16000S with SoLoNO_x burners
 Proposed Installation Date: March 2021
 Power: 15,473 hp (11.54 MW) (@ 32°F)
 Maximum Operating Rate: 114.47 mmBtu/hr (LHV @ 32°F)
 127.06 mmBtu/hr (HHV @ 32°F)
 Primary Fuel: Natural Gas
 Controls: None

Emission Unit 012 (712), Solar Titan 130 Compressor Turbine [Facility ID 709]

Description:

Model: Solar Titan 130-23502S with SoLoNO_x burners
 Proposed Installation Date: March 2021
 Power: 22,759 hp (16.97 MW) (@ 32°F)
 Maximum Operating Rate: 155.46 mmBtu/hr (LHV @ 32°F)
 172.56 mmBtu/hr (HHV @ 32°F)
 Primary Fuel: Natural Gas
 Controls: None

Natural Gas Compressors

Compressor Type: Centrifugal with Dry Seals
 Installation Date: March 2021

APPLICABLE REGULATIONS:

401 KAR 60:005, Section 2(2)(ffff), 40 C.F.R. 60.4300 through 60.4420, Table 1 (**Subpart KKKK**), *Standards of Performance for Stationary Combustion Turbines*

STATE-ORIGIN REQUIREMENTS:

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

1. Operating Limitations:

- a. The permittee must operate and maintain the stationary combustion turbines, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. [40 CFR 60.4333(a)]
- b. The permittee shall not exceed the following operating hours on an annual basis for each turbine: [401 KAR 52:020, Section 10]
 - (1) 100 hours per year of low load as defined as 40% or less.
 - (2) 200 hours per year of low temperature operation defined as <0 °F.
 - (3) 200 Startup and Shutdown cycles per year.

Compliance Demonstration Method:

See **5. Specific Recordkeeping Requirements a.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**2. Emission Limitations:**

- a. NO_x emissions from each new turbine firing natural gas shall not exceed 25 ppm at 15 percent O₂ or 150 ng/J of useful output (1.2 lb/MWh). [40 CFR 60.4320(a), & Table 1 of 40 CFR 60, Subpart KKKK]

Compliance Demonstration Method:

See **3. Testing Requirements.**

- b. NO_x emissions from each turbine operating at less than 75 percent of peak load or at temperatures less than 0 °F shall not exceed 150 ppm at 15 percent O₂ or 1100 ng/J of useful output (8.7 lb/MWh). [40 CFR 60.4320(a) & Table 1 of 40 CFR 60, Subpart KKKK]

Compliance Demonstration Method:

See **5. Specific Recordkeeping Requirements** b.

- c. The permittee must comply with either 40 CFR 60.4330(a)(1) or (2): [40 CFR 60.4330(a)]
- (1) The permittee shall not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO₂ in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output; or; [40 CFR 60.4330(a)(1)]
- (2) The permittee shall not burn in the subject stationary combustion turbines any fuel which contains total potential sulfur emissions in excess of 26 ng SO₂/J (0.060 lb SO₂/mmBtu) heat input. [40 CFR 60.4330(a)(2)]

Compliance Demonstration Method:

Compliance with the SO₂ limits shall be demonstrated by fuel characteristics or representative fuel sampling. See **4. Specific Monitoring Requirements.**

- d. The permittee shall provide the utmost care and consideration, in the handling of materials from which hazardous matter or toxic substances may be emitted, to the potentially harmful effects of the emissions resulting from such activities. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:

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

3. Testing Requirements:

- a. The permittee must conduct subsequent NO_x performance tests on an annual basis (no more than 14 calendar months following the previous performance test). [40 CFR 4340(a) & 40 CFR 60.4400(a)]
- The permittee may choose to use one of the two following methodologies to conduct

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

performance tests. For each test run: [40 CFR 60.4400(a)(1)]

- (1) Measure the NO_x concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in Appendix A of 40 CFR 60. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in Appendix A of 40 CFR 60, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NO_x emission rate: [40 CFR 60.4400(a)(1)(i)]

$$E = \frac{1.194 \times 10^{-7} \times (\text{NO}_x)_c \times Q_{\text{std}}}{P}$$

Where:

- E = NO_x emission rate, in lb/MWh
 1.194×10^{-7} = conversion constant, in lb/dscf-ppm
 $(\text{NO}_x)_c$ = average NO_x concentration for the run, in ppm
 Q_{std} = stack gas volumetric flow rate, in dscf/hr
P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to 40 CFR 60.4350(f)(2); or

- (2) Measure the NO_x and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in Appendix A of 40 CFR 60. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in Appendix A of 40 CFR 60 to calculate the NO_x emission rate in lb/mmBtu. Then, use Equations 1 and, if necessary, 2 and 3 in 40 CFR 60.4350(f) to calculate the NO_x emission rate in lb/MWh. [40 CFR 60.4400(a)(1)(ii)]
- b. If the NO_x emission result from the performance test is less than or equal to 75 percent of the NO_x emission limit for the turbine, the permittee may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO_x emission limit for the turbine, the permittee must resume annual performance tests. [40 CFR 60.4340(a)(1)]
- c. The NO_x performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. The permittee may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. The permittee must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes. [40 CFR 60.4400(b)]
- (1) Compliance with the applicable emission limit in 40 CFR 60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NO_x emission rate at each tested level meets the applicable emission

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

limit in 40 CFR 60.4320. [40 CFR 60.4400(b)(4)]

d. Refer to **Section G, General Provisions G.4.**

4. Specific Monitoring Requirements:

- a. The permittee may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO₂/J (0.060 lb SO₂/mmBtu) heat input. The permittee must use one of the following sources of information to make the required demonstration: [40 CFR 60.4365]
 - (1) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the total sulfur content for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet and has potential sulfur emissions of less than 26 ng SO₂/J (0.060 lb SO₂/mmBtu) heat input; or [40 CFR 60.4365(a)]
 - (2) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO₂/J (0.060 lb SO₂/mmBtu) heat input. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D to 40 CFR 75 is required. [40 CFR 60.4365 (b)]
- b. If the option to sample each delivery of fuel oil has been selected, the permittee must immediately switch to one of the other oil sampling options (i.e., daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.05 weight percent. The permittee must continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and the permittee must evaluate excess emissions according to 40 CFR 60.4385(a). When all of the fuel from the delivery has been burned, the permittee may resume using the as-delivered sampling option. [40 CFR 60.4385(b)]
- c. The permittee shall monitor the following for each turbine on a monthly basis: [401 KAR 52:020, Section 10]
 - (1) Hours each turbine operated at temperatures less than 0 °F.
 - (2) Hours each turbine is operated at less than 40% of peak load.
 - (3) Number of startup and shutdown cycles.
 - (4) Fuel usage at each turbine (MMscf).

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain monthly and 12-month rolling total records of the following for each turbine: [401 KAR 52:020, Section 10]
 - (1) Hours each turbine operated at temperatures less than 0 °F.
 - (2) Hours each turbine is operated at less than 40% of peak load.
 - (3) Number of startup and shutdown cycles.
 - (4) Fuel usage at each turbine (MMscf)
- b. The permittee shall keep on site the necessary emissions profile for NO_x at different operating loads as provided by the manufacturer. [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**6. Specific Reporting Requirements:**

- a. The notification requirements of 40 CFR 60.8 apply to the subsequent performance tests. [40 CFR 63.4375(b)]
- b. Within 60 days after the date of completing each performance test, the permittee must submit the results following the procedures specified in 40 CFR 63.4375(g). The permittee must submit the report in a file format generated using the EPA's Electronic Reporting Tool (ERT). Alternatively, the permittee may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) accompanied by the other information required by 40 CFR 60.8(f)(2) in PDF format. [40 CFR 63.4375(e)]
- c. The permittee must submit to the Administrator semiannual reports of the following recorded information. Beginning on January 15, 2027, or once the report template for this subpart has been available on the Compliance and Emissions Data Reporting Interface (CEDRI) website (<https://www.epa.gov/electronic-reporting-air-emissions/cedri>) for one year, whichever date is later, submit all subsequent reports using the appropriate electronic report template on the CEDRI website for this subpart and following the procedure specified in 40 CFR 60.4375(g). The date report templates become available will be listed on the CEDRI website. Unless the Administrator or delegated State agency or other authority has approved a different schedule for submission of reports, the report must be submitted by the deadline specified in 40 CFR 60 Subpart KKKK, regardless of the method in which the report is submitted. [40 CFR 63.4375(f)]
- d. The permittee must submit notifications or reports to the EPA via CEDRI, which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The EPA will make all the information submitted through CEDRI available to the public without further notice to the permittee. Do not use CEDRI to submit information claimed as CBI. If the permittee wishes to assert a CBI claim for some of the information in the report or notification, the permittee must submit a complete file in the format specified in 40 CFR Subpart KKKK, including information claimed to be CBI, to the EPA following the procedures in 40 CFR 60.4375(g)(1) and (2). [40 CFR 63.4375(g)]
- e. Any records required to be maintained by 40 CFR 60, Subpart KKKK that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation. [40 CFR 63.4375(j)]
- f. All reports required under 40 CFR 60.7(c) must be electronically submitted via CEDRI by the 30th day following the end of each 6-month period. [40 CFR 60.4395]
- g. Refer to **Section F, Monitoring, Recordkeeping, and Reporting Requirements.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 013 (713), 4SLB Emergency Generator****Description:**

Model: Waukesha VGF-L36GL (non-certified)
Model Year: 2020
Proposed Installation Date: March 2021
Power: 880 hp
Primary Fuel: Natural Gas
Controls: None

APPLICABLE REGULATIONS:

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

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

1. Operating Limitations:

- a. An affected source that meets any of the criteria in 40 CFR 63.6590(c)(1) through (7) must meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart JJJJ. No further requirements apply for such engines under 40 CFR 63, Subpart ZZZZ. [40 CFR 63.6590(c)]
- b. In order for the engine to be considered an emergency stationary ICE under this 40 CFR 60, Subpart JJJJ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.4243(d)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 60.4243(d)(1) through (3), the engine will not be considered an emergency engine under 40 CFR 60, Subpart JJJJ and must meet all requirements for non-emergency engines. [40 CFR 60.4243(d)]
 - (1) There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR 60.4243(d)(1)]
 - (2) The permittee may operate the emergency stationary ICE for any combination of the purposes specified in 40 CFR 60.4243(d)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4243(d)(3) counts as part of the 100 hours per calendar year allowed by 40 CFR 60.4243(d)(2). [40 CFR 60.4243(d)(2)]
 - (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency

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

ICE beyond 100 hours per calendar year. [40 CFR 60.4243(d)(2)(i)]

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4243(d)(2). Except as provided in 40 CFR 60.4243(d)(3)(i), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4243(d)(3)]

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [40 CFR 60.4243(d)(3)(i)]

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator. [40 CFR 60.4243(d)(3)(i)(A)]

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [40 CFR 60.4243(d)(3)(i)(B)]

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [40 CFR 60.4243(d)(3)(i)(C)]

(D) The power is provided only to the facility itself or to support the local transmission and distribution system. [40 CFR 60.4243(d)(3)(i)(D)]

(E) The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine permittee. [40 CFR 60.4243(d)(3)(i)(E)]

2. Emission Limitations:

a. The permittee of a stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) must comply with the emission standards in Table 1 to 40 CFR 60, Subpart JJJJ for their stationary emergency SI ICE as follows: [40 CFR 60.4233(e)]

(1) Emissions of NO_x shall not exceed 2.0 g/hp-hr or 160 ppmvd at 15% O₂

(2) Emissions of CO shall not exceed 4.0 g/hp-hr or 540 ppmvd at 15% O₂.

(3) Emissions of VOC shall not exceed 1.0 g/hp-hr or 86 ppmvd at 15% O₂.

b. The permittee of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in 40 CFR 60.4233 over the entire life of the engine. [40 CFR 60.4234]

Compliance Demonstration Method:

The permittee purchasing a non-certified engine must demonstrate compliance with the emission standards specified in 40 CFR 60.4233(e) according to the requirements specified in 40 CFR 60.4244, as applicable, and according to 40 CFR 60.4243(b)(2)(ii). [40 CFR 60.4243(b)(2)]

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

3. Testing Requirements:

- a. The permittee must conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter. [40 CFR 60.4243(b)(2)(ii)]
- b. Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in 40 CFR 60.8 and under the specific conditions that are specified by Table 2 to 40 CFR 60, Subpart JJJJ. [40 CFR 60.4244(a)]
- c. The permittee may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR 60.8(c). If the permittee's stationary SI internal combustion engine is non-operational, the permittee does not need to startup the engine solely to conduct a performance test; however, the permittee must conduct the performance test immediately upon startup of the engine. [40 CFR 60.4244(b)]
- d. The permittee must conduct three separate test runs for each performance test required in 40 CFR 60.4244, as specified in 40 CFR 60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour. [40 CFR 60.4244(c)]
- e. To determine compliance with the NO_x mass per unit output emission limitation, convert the concentration of NO_x in the engine exhaust using Equation 1 of 40 CFR 60.4244: [40 CFR 60.4244(d)]

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP\text{-hr}} \quad (\text{Eq. 1})$$

Where:

ER = Emission rate of NO_x in g/HP-hr.

C_d = Measured NO_x concentration in parts per million by volume (ppmv).

1.912 × 10⁻³ = Conversion constant for ppm NO_x to grams per standard cubic meter at 20 degrees Celsius.

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

T = Time of test run, in hours.

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

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

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP\text{-hr}} \quad (\text{Eq. 2})$$

Where:

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

C_d = Measured CO concentration in ppmv.

1.164 × 10⁻³ = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

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

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

T = Time of test run, in hours.
 HP-hr = Brake work of the engine, in HP-hr.

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

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{\text{HP-hr}} \quad (\text{Eq. 3})$$

Where:

ER = Emission rate of VOC in g/HP-hr.
 C_d = VOC concentration measured as propane in ppmv.
 1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.
 Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.
 T = Time of test run, in hours.
 HP-hr = Brake work of the engine, in HP-hr.

- h. If the permittee chooses to measure VOC emissions using either Method 18 of 40 CFR 60, Appendix A, or Method 320 of 40 CFR 63, Appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of 40 CFR 60.4244. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of 40 CFR 60.4244. [40 CFR 60.4244(g)]

$$RF_i = \frac{C_{Mi}}{C_{Ai}} \quad (\text{Eq. 4})$$

Where:

RF_i = Response factor of compound i when measured with EPA Method 25A.
 C_{Mi} = Measured concentration of compound i in ppmv as carbon.
 C_{Ai} = True concentration of compound i in ppmv as carbon.

$$C_{icorr} = RF_i \times C_{imeas} \quad (\text{Eq. 5})$$

Where:

C_{icorr} = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.
 C_{imeas} = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{P_{eq}} = 0.6098 \times C_{icorr} \quad (\text{Eq. 6})$$

Where:

$C_{P_{eq}}$ = Concentration of compound i in mg of propane equivalent per DSCM.

- i. Refer to **Section G, General Provisions G.4.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**4. Specific Monitoring Requirements:**

- a. If the emergency stationary SI internal combustion engine that is greater than or equal to 500 HP that was built on or after July 1, 2010, does not meet the standards applicable to non-emergency engines, the permittee must install a non-resettable hour meter. [40 CFR 60.4237(a)]
- b. The permittee shall monitor the amount of fuel combusted in the engine (MMscf) on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee must keep records of the information in 40 CFR 60.4245(a)(1) through (4). [40 CFR 60.4245(a)]
 - (1) All notifications submitted to comply with 40 CFR 60, Subpart JJJJ and all documentation supporting any notification. [40 CFR 60.4245(a)(1)]
 - (2) Maintenance conducted on the engine. [40 CFR 60.4245(a)(2)]
 - (3) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards. [40 CFR 60.4245(a)(4)]
- b. For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 60.4245(b)]
- c. The permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 60.4243(b)(2)(ii)]
- d. The permittee shall maintain records of the amount of fuel combusted in the engine (MMscf) on a monthly basis. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

- a. The permittee of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in 40 CFR 60.4244 within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference—see 40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7. Performance tests must be reported electronically according to 40 CFR 60.4245(f). [40 CFR 60.4245(d)]
- b. Within 60 days after the date of completing each performance test, the permittee must submit the results following the procedures specified in 40 CFR 60.4245(g). Data collected using test methods that are supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air->

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

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

- c. The permittee must submit notifications or reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The EPA will make all the information submitted through CEDRI available to the public without further notice to the permittee. Do not use CEDRI to submit information you claim as CBI. If the permittee wishes to assert a CBI claim for some of the information in the report or notification, the permittee must submit a complete file in the format specified in 40 CFR 60, Subpart JJJJ, including information claimed to be CBI, to the EPA following the procedures in 40 CFR 60.4245(g)(1) and (2). [40 CFR 60.4245(g)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 014 (714), Fuel Gas Heater****Description:**

Heat Input Capacity: 1.6 MMBtu/hr
Fuel: Natural Gas
Controls: None

APPLICABLE REGULATIONS:

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

STATE-ORIGIN REQUIREMENTS:

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

1. Operating Limitations:

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

- a. The permittee shall comply with 401 KAR 50:055, Section 2(5); [401 KAR 59:015, Section 7(1)(a)]
- b. 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)]
- c. 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)]
- d. 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)]
- e. Startups and shutdowns shall be conducted according to either: [401 KAR 59:015, Section 7(1)(e)]
 - (1) The manufacturer's recommended procedures; or [401 KAR 59:015, Section 7(1)(e)1.]
 - (2) 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 0.56 lb/MMBtu actual heat input. [401 KAR 59:015, Section 4(1)(a)]
- b. The permittee shall not cause emissions of particulate matter in excess of 20 percent opacity, except: [401 KAR 59:015, Section 4(2)]

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

- (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 3.0 lb/MMBtu actual heat input. [401 KAR 59:015, Section 5(1)(a).1.]

Compliance Demonstration Method:

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

- d. The permittee shall provide the utmost care and consideration, in the handling of materials from which hazardous matter or toxic substances may be emitted, to the potentially harmful effects of the emissions resulting from such activities. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:

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

3. Testing Requirements:

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

4. Specific Monitoring Requirements:

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

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the amount of natural gas combusted, in MMscf, on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall keep records of the manufacturer's recommended procedures for startup and shutdown, any instance in which the recommended procedures were not followed, and any corrective action taken. [401 KAR 52:020, Section 10]

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)

Emission Unit FUG, Fugitive Piping Components

Pipe Component	*Number of Components
Connections	11,175
Open Ended Lines	128
Pump Seals	7
Valves	2,330
Other	42

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

APPLICABLE REGULATIONS:

401 KAR 60:005, Section 2(2)(iii), 40 C.F.R. 60.5360a through 60.5432a, Tables 1 through 3 (**Subpart OOOOa**), *Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 and On or Before December 6, 2022*

STATE-ORIGIN REQUIREMENTS:

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

1. Operating Limitations:

- a. For each affected facility under 40 CFR 60.5365a(j), the permittee must reduce GHG (in the form of a limitation on emissions of methane) and VOC emissions by complying with the requirements of 40 CFR 60.5397a(a) through (j). The requirements in 40 CFR 60.4397a are independent of the closed vent system and cover requirements in 40 CFR 60.5411a. Alternatively, the permittee may comply with the requirements of 40 CFR 60.5398b, including the notification, recordkeeping, and reporting requirements outlined in 40 CFR 60.5424b. For the purpose of 40 CFR 60, Subpart OOOOa, compliance with the requirements in 40 CFR 60.5398b will be deemed compliance with 40 CFR 60.5397a. When complying with 40 CFR 60.5398b, the definitions in 40 CFR 60.5430b shall apply for those activities conducted under 40 CFR 60.5398b. [40 CFR 60.5397a]
- b. The permittee must monitor all fugitive emission components, as defined in 40 CFR 60.5430a, in accordance with 40 CFR 60.5397a(b) through (g). The permittee must repair all sources of fugitive emissions in accordance with 40 CFR 60.5397a(h). The permittee must keep records in accordance with 40 CFR 60.5397a(i) and report in accordance with 40 CFR 60.5397a(j). For purposes of 40 CFR 60.5397a, fugitive emissions are defined as any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 parts per million (ppm) or greater using Method 21 of appendix A-7 to Part 60. [40 CFR 60.5397a(a)]
- c. At all times, including periods of startup, shutdown, and malfunction, the permittee shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing

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

emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. The provisions for exemption from compliance during periods of startup, shutdown and malfunctions provided for in 40 CFR 60.8(c) do not apply to 40 CFR 60, Subpart OOOOa. [40 CFR 60.5370a(b)]

Compliance Demonstration Method

- (1) To achieve initial compliance with the fugitive emission standards for each collection of fugitive emissions components at a compressor station the permittee must comply with 40 CFR 60.5410a(j)(1) through (5). [40 CFR 60.5410a(j)]
 - (i) The permittee must develop a fugitive emissions monitoring plan as required in 40 CFR 60.5397a(b), (c), and (d). [40 CFR 60.5410a(j)(1)]
 - (ii) The permittee must conduct an initial monitoring survey as required in 40 CFR 60.5397a(f). [40 CFR 60.5410a(j)(2)]
 - (iii) The permittee must maintain the records specified in 40 CFR 60.5420a(c)(15). [40 CFR 60.5410a(j)(3)]
 - (iv) The permittee must repair each identified source of fugitive emissions for each affected facility as required in 40 CFR 60.5397a(h). [40 CFR 60.5410a(j)(4)]
 - (v) The permittee must submit the initial annual report for each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station as required in 40 CFR 60.5420a(b)(1) and (7). [40 CFR 60.5410a(j)(5)]
 - (2) For each collection of fugitive emissions components at a compressor station, the permittee must demonstrate continuous compliance with the fugitive emission standards specified in 40 CFR 60.5397a(a)(1) according to 40 CFR 60.5415a(h)(1) through (4). [40 CFR 60.5415a(h)]
 - (i) The permittee must conduct periodic monitoring surveys as required in 40 CFR 60.5397a(g). [40 CFR 60.5415a(h)(1)]
 - (ii) The permittee must repair each identified source of fugitive emissions as required in 40 CFR 60.5397a(h). [40 CFR 60.5415a(h)(2)]
 - (iii) The permittee must maintain records as specified in 40 CFR 60.5420a(c)(15). [40 CFR 60.5415a(h)(3)]
 - (iv) The permittee must submit annual reports for collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station as required in 40 CFR 60.5420a(b)(1) and (7). [40 CFR 60.5415a(h)(4)]
- d. Each identified source of fugitive emissions shall be repaired, as defined in 40 CFR 60.5430a, in accordance with 40 CFR 60.5370a(h)(1) and (2). [40 CFR 60.5397a(h)]
- (1) A first attempt at repair shall be made no later than 30 calendar days after detection of the fugitive emissions. [40 CFR 60.5397a(h)(1)]
 - (2) Repair shall be completed as soon as practicable, but no later than 30 calendar days after the first attempt at repair as required in 40 CFR 60.5397a(h)(1). [40 CFR 60.5397a(h)(2)]
 - (3) Delay of repair will be allowed if the conditions in 40 CFR 60.5370a(h)(3)(i) or (ii) are met. [40 CFR 60.5397a(h)(3)]

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

- (i) If the repair is technically infeasible, would require a vent blowdown, a compressor station shutdown, or would be unsafe to repair during operation of the unit, the repair must be completed during the next scheduled compressor station shutdown for maintenance, after a scheduled vent blowdown, or within 2 years of detecting the fugitive emissions, whichever is earliest. For purposes of 40 CFR 60.5397a(h)(3), a vent blowdown is the opening of one or more blowdown valves to depressurize major production and processing equipment, other than a storage vessel. [40 CFR 60.5397a(h)(3)(i)]
- (ii) If the repair requires replacement of a fugitive emissions component or a part thereof, but the replacement cannot be acquired and installed within the repair timelines specified in 40 CFR 60.5397a(h)(1) and (2) due to either of the conditions specified in 40 CFR 60.5397a(h)(3)(ii)(A) or (B), the repair must be completed in accordance with 40 CFR 60.9397a(h)(3)(ii)(C) and documented in accordance with 40 CFR 60.5420a(c)(15)(vii)(I). [40 CFR 60.5397a(h)(3)(ii)]
 - (A) Valve assembly supplies had been sufficiently stocked but are depleted at the time of the required repair. [40 CFR 60.5397a(h)(3)(ii)(A)]
 - (B) A replacement fugitive emissions component or a part thereof requires custom fabrication. [40 CFR 60.5397a(h)(3)(ii)(B)]
 - (C) The required replacement must be ordered no later than 10 calendar days after the first attempt at repair. The repair must be completed as soon as practicable, but no later than 30 calendar days after receipt of the replacement component, unless the repair requires a compressor station shutdown. If the repair requires a compressor station shutdown, the repair must be completed in accordance with the timeframe specified in 40 CFR 60.5397a(h)(3)(i). [40 CFR 60.5397a(h)(3)(ii)(C)]
- (4) Each identified source of fugitive emissions must be resurveyed to complete repair according to the requirements in 40 CFR 60.5397a(h)(4)(i) through (iv), to ensure that there are no fugitive emissions. [40 CFR 60.5397a(h)(4)]
 - (i) The permittee may resurvey the fugitive emissions components to verify repair using either Method 21 of appendix A-7 of part 60 or optical gas imaging. [40 CFR 60.5397a(h)(4)(i)]
 - (ii) For each repair that cannot be made during the monitoring survey when the fugitive emissions are initially found, a digital photograph must be taken of that component or the component must be tagged during the monitoring survey when the fugitives were initially found for identification purposes and subsequent repair. The digital photograph must include the date that the photograph was taken and must clearly identify the component by location within the site (e.g., the latitude and longitude of the component or by other descriptive landmarks visible in the picture). [40 CFR 60.5397a(h)(4)(ii)]
 - (iii) Operators that use Method 21 of appendix A-7 of part 60 to resurvey the repaired fugitive emissions components are subject to the resurvey provisions specified in 40 CFR 60.5397a(h)(4)(iii)(A) and (B). [40 CFR 60.5397a(h)(4)(iii)]
 - (A) A fugitive emissions component is repaired when the Method 21 instrument indicates a concentration of less than 500 ppm above background or when no soap bubbles are observed when the alternative screening procedures specified in section 8.3.3 of Method 21 of appendix A-7 of part 60 are used. [40 CFR

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

- 60.5397a(h)(4)(iii)(A)]
- (B) Operators must use the Method 21 monitoring requirements specified in 40 CFR 60.5397a(c)(8)(ii) or the alternative screening procedures specified in section 8.3.3 of Method 21 of appendix A-7 of part 60. [40 CFR 60.5397a(h)(4)(iii)(B)]
- (iv) Operators that use optical gas imaging to resurvey the repaired fugitive emissions components, are subject to the resurvey provisions specified in 40 CFR 60.5397a(h)(4)(iv)(A) and (B). [40 CFR 60.5397a(h)(4)(iv)]
- (A) A fugitive emissions component is repaired when the optical gas imaging instrument shows no indication of visible emissions. [40 CFR 60.5397a(h)(4)(iv)(A)]
- (B) Operators must use the optical gas imaging monitoring requirements specified in paragraph (c)(7) of this section. [40 CFR 60.5397a(h)(4)(iv)(B)]

2. Emission Limitations:

The permittee shall provide the utmost care and consideration, in the handling of materials from which hazardous matter or toxic substances may be emitted, to the potentially harmful effects of the emissions resulting from such activities. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:

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

3. Testing Requirements:

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

4. Monitoring Requirements:

- a. The permittee must develop an emissions monitoring plan that covers the collection of fugitive emissions components at compressor stations within each company-defined area in accordance with 40 CFR 60.5397a(c) and (d). [40 CFR 60.5397a(b)]
- b. Fugitive emissions monitoring plans must include the elements specified in 40 CFR 60.5397a(c)(1) through (8), at a minimum. [40 CFR 60.5397a(c)]
 - (1) Surveys must be conducted at least as frequently as required by 40 CFR 60.5397a(f) and (g). [40 CFR 60.5397a(c)(1)]
 - (2) Technique for determining fugitive emissions (i.e., Method 21 of appendix A-7 to part 60 or optical gas imaging meeting the requirements in 40 CFR 60.5397a(c)(7)(i) through (vii)). [40 CFR 60.5397a(c)(2)]
 - (3) Manufacturer and model number of fugitive emissions detection equipment to be used. [40 CFR 60.5397a(c)(3)]
 - (4) Procedures and timeframes for identifying and repairing fugitive emissions

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

- components from which fugitive emissions are detected, including timeframes for fugitive emission components that are unsafe to repair. The repair schedule must meet the requirements of 40 CFR 60.5397a(h) at a minimum. [40 CFR 60.5397a(c)(4)]
- (5) Procedures and timeframes for verifying fugitive emission component repairs. [40 CFR 60.5397a(c)(5)]
- (6) Records that will be kept and the length of time records will be kept. [40 CFR 60.5397a(c)(6)]
- (7) If using optical gas imaging, the plan must also include the elements specified in 40 CFR 60.5397a(c)(7)(i) through (vii). [40 CFR 60.5397a(c)(7)]
- (i) Verification that the optical gas imaging equipment meets the specifications of 40 CFR 60.5397a(c)(7)(i)(A) and (B). This verification is an initial verification, and may either be performed by the facility, by the manufacturer, or by a third party. For the purposes of complying with the fugitive emissions monitoring program with optical gas imaging, a fugitive emission is defined as any visible emissions observed using optical gas imaging. [40 CFR 60.5397a(c)(7)(i)]
- (A) The optical gas imaging equipment must be capable of imaging gases in the spectral range for the compound of highest concentration in the potential fugitive emissions. [40 CFR 60.5397a(c)(7)(i)(A)]
- (B) The optical gas imaging equipment must be capable of imaging a gas that is half methane, half propane at a concentration of 10,000 ppm at a flow rate of ≤ 60 g/hr from a quarter inch diameter orifice. [40 CFR 60.5397a(c)(7)(i)(B)]
- (ii) Procedure for a daily verification check. [40 CFR 60.5397a(c)(7)(ii)]
- (iii) Procedure for determining the operator's maximum viewing distance from the equipment and how the operator will ensure that this distance is maintained. [40 CFR 60.5397a(c)(7)(iii)]
- (iv) Procedure for determining maximum wind speed during which monitoring can be performed and how the operator will ensure monitoring occurs only at wind speeds below this threshold. [40 CFR 60.5397a(c)(7)(iv)]
- (v) Procedures for conducting surveys, including the items specified in 40 CFR 60.5397a(c)(7)(v)(A) through (C). [40 CFR 60.5397a(c)(7)(v)]
- (A) How the operator will ensure an adequate thermal background is present in order to view potential fugitive emissions. [40 CFR 60.5397a(c)(7)(v)(A)]
- (B) How the operator will deal with adverse monitoring conditions, such as wind. [40 CFR 60.5397a(c)(7)(v)(B)]
- (C) How the operator will deal with interferences (e.g., steam). [40 CFR 60.5397a(c)(7)(v)(C)]
- (vi) Training and experience needed prior to performing surveys. [40 CFR 60.5397a(c)(7)(vi)]
- (vii) Procedures for calibration and maintenance. At a minimum, procedures must comply with those recommended by the manufacturer. [40 CFR 60.5397a(c)(7)(vii)]
- (8) If using Method 21 of appendix A-7 of part 60, the plan must also include the elements specified in 40 CFR 60.5397a(c)(8)(i) through (iii). For the purposes of complying with the fugitive emissions monitoring program using Method 21 of appendix A-7 of part 60 a fugitive emission is defined as an instrument reading of 500 ppm or greater. [40 CFR 60.5397a(c)(8)]

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

- (i) **Verification that the monitoring equipment meets the requirements specified in Section 6.0 of Method 21 at 40 CFR part 60, appendix A-7.** For purposes of instrument capability, the fugitive emissions definition shall be 500 ppm or greater methane using a FID-based instrument. If the permittee wishes to use an analyzer other than a FID-based instrument, the permittee must develop a site-specific fugitive emission definition that would be equivalent to 500 ppm methane using a FID-based instrument (e.g., 10.6 eV PID with a specified isobutylene concentration as the fugitive emission definition would provide equivalent response to the compound of interest). [40 CFR 60.5397a(c)(8)(i)]
 - (ii) **Procedures for conducting surveys.** At a minimum, the procedures shall ensure that the surveys comply with the relevant sections of Method 21 at 40 CFR part 60, appendix A-7, including Section 8.3.1. [40 CFR 60.5397a(c)(8)(ii)]
 - (iii) **Procedures for calibration.** The instrument must be calibrated before use each day of its use by the procedures specified in Method 21 of appendix A-7 of part 60. At a minimum, you must also conduct precision tests at the interval specified in Method 21 of appendix A-7 of part 60, Section 8.1.2, and a calibration drift assessment at the end of each monitoring day. The calibration drift assessment must be conducted as specified in 40 CFR 60.5397a(c)(8)(iii)(A). Corrective action for drift assessments is specified in 40 CFR 60.5397a(c)(8)(iii)(B) and (C). [40 CFR 60.5397a(c)(8)(iii)]
 - (A) Check the instrument using the same calibration gas that was used to calibrate the instrument before use. Follow the procedures specified in Method 21 of appendix A-7 of part 60, Section 10.1, except do not adjust the meter readout to correspond to the calibration gas value. If multiple scales are used, record the instrument reading for each scale used. Divide the arithmetic difference of the initial and post-test calibration response by the corresponding calibration gas value for each scale and multiply by 100 to express the calibration drift as a percentage. [40 CFR 60.5397a(c)(8)(iii)(A)]
 - (B) If a calibration drift assessment shows a negative drift of more than 10 percent, then all equipment with instrument readings between the fugitive emission definition multiplied by (100 minus the percent of negative drift/divided by 100) and the fugitive emission definition that was monitored since the last calibration must be re-monitored. [40 CFR 60.5397a(c)(8)(iii)(B)]
 - (C) If any calibration drift assessment shows a positive drift of more than 10 percent from the initial calibration value, then, at the permittee's discretion, all equipment with instrument readings above the fugitive emission definition and below the fugitive emission definition multiplied by (100 plus the percent of positive drift/divided by 100) monitored since the last calibration may be re-monitored. [40 CFR 60.5397a(c)(8)(iii)(C)]
- c. Each fugitive emissions monitoring plan must include the elements specified in 40 CFR 60.5370a(d)(1) through (3), at a minimum, as applicable. [40 CFR 60.5397a(d)]
- (1) If using optical gas imaging, the plan must include procedures to ensure that all fugitive emissions components are monitored during each survey. Example procedures include, but are not limited to, a sitemap with an observation path, a written narrative of where the fugitive emissions components are located and how they will be monitored, or an

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

- inventory of fugitive emissions components. [40 CFR 60.5397a(d)(1)]
- (2) If using Method 21 of appendix A-7 of part 60, the plan must include a list of fugitive emissions components to be monitored and method for determining the location of fugitive emissions components to be monitored in the field (e.g., tagging, identification on a process and instrumentation diagram, etc.). [40 CFR 60.5397a(d)(2)]
 - (3) The fugitive emissions monitoring plan must include the written plan developed for all of the fugitive emissions components designated as difficult-to-monitor in accordance with 40 CFR 60.5370a(g)(3), and the written plan for fugitive emissions components designated as unsafe-to-monitor in accordance with 40 CFR 60.5370a(g)(4). [40 CFR 60.5397a(d)(3)]
- d. Each monitoring survey shall observe each fugitive emissions component, as defined in 40 CFR 60.5430a, for fugitive emissions. [40 CFR 60.5397a(e)]
 - e. The permittee must conduct an initial monitoring survey within 90 days of the startup of a new compressor station for each collection of fugitive emissions components at the new compressor station or by June 3, 2017, whichever is later. For a modified collection of fugitive emissions components at a compressor station, the initial monitoring survey must be conducted within 90 days of the modification or by June 3, 2017, whichever is later. [40 CFR 60.5397a(f)(2)]
 - f. A monitoring survey of each collection of fugitive emissions components at a compressor station must be performed at the frequencies specified in 40 CFR 60.5397a(g)(2), with the exceptions noted in 40 CFR 60.5397a(g)(3) through (6). [40 CFR 60.5397a(g)]
 - (1) Except as provided in this 40 CFR 60.5397a(g)(2), a monitoring survey of the collection of fugitive emissions components at a compressor station must be conducted at least quarterly after the initial survey. Consecutive quarterly monitoring surveys must be conducted at least 60 days apart. [40 CFR 60.5397a(g)(2)]
 - (2) Fugitive emissions components that cannot be monitored without elevating the monitoring personnel more than 2 meters above the surface may be designated as difficult-to-monitor. Fugitive emissions components that are designated difficult-to-monitor must meet the specifications of 40 CFR 60.5397a(g)(3)(i) through (iv). [40 CFR 60.5397a(g)(3)]
 - (i) A written plan must be developed for all of the fugitive emissions components designated difficult-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by 40 CFR 60.5397a(b), (c), and (d). [40 CFR 60.5397a(g)(3)(i)]
 - (ii) The plan must include the identification and location of each fugitive emissions component designated as difficult-to-monitor. [40 CFR 60.5397a(g)(3)(ii)]
 - (iii) The plan must include an explanation of why each fugitive emissions component designated as difficult-to-monitor is difficult-to-monitor. [40 CFR 60.5397a(g)(3)(ii)]
 - (iv) The plan must include a schedule for monitoring the difficult-to-monitor fugitive emissions components at least once per calendar year. [40 CFR 60.5397a(g)(3)(iv)]
 - g. Fugitive emissions components that cannot be monitored because monitoring personnel would be exposed to immediate danger while conducting a monitoring survey may be

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

designated as unsafe-to-monitor. Fugitive emissions components that are designated unsafe-to-monitor must meet the specifications of 40 CFR 60.5397a(g)(4)(i) through (iv). [40 CFR 60.5397a(g)(4)]

- (i) A written plan must be developed for all of the fugitive emissions components designated unsafe-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by 40 CFR 60.5397a(b), (c), and (d). [40 CFR 60.5397a(g)(4)(i)]
- (ii) The plan must include the identification and location of each fugitive emissions component designated as unsafe-to-monitor. [40 CFR 60.5397a(g)(4)(ii)]
- (iii) The plan must include an explanation of why each fugitive emissions component designated as unsafe-to-monitor is unsafe-to-monitor. [40 CFR 60.5397a(g)(4)(iii)]
- (iv) The plan must include a schedule for monitoring the fugitive emissions components designated as unsafe-to-monitor. [40 CFR 60.5397a(g)(4)(iv)]

5. Recordkeeping Requirements:

- a. Records for each monitoring survey shall be maintained as specified 40 CFR 60.5420a(c)(15). [40 CFR 60.5397a(i)]
- b. The permittee must maintain the records identified as specified in 40 CFR 60.7(f) and in 40 CFR 60.5420a(c)(1) through (18). All records required by 40 CFR 60, Subpart OOOOa must be maintained either onsite or at the nearest local field office for at least 5 years. Any records required to be maintained by 40 CFR 60, Subpart OOOOa that are submitted electronically via the EPA's CDX may be maintained in electronic format. [40 CFR 60.5420a(c)]
 - (1) For each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station, maintain the records identified in 40 CFR 60.5420a(c)(15)(i) through (viii). [40 CFR 60.5420a(c)(15)]
 - (i) The date of the startup of production or the date of the first day of production after modification for each collection of fugitive emissions components at a well site and the date of startup or the date of modification for each collection of fugitive emissions components at a compressor station. [40 CFR 60.5420a(c)(15)(i)]
 - (ii) The fugitive emissions monitoring plan as required in 40 CFR 60.5397a(b), (c), and (d). [40 CFR 60.5420a(c)(15)(vi)]
 - (iii) The records of each monitoring survey as specified in 40 CFR 60.5420a(c)(15)(vii)(A) through (I). [40 CFR 60.5420a(c)(15)(vii)]
 - (A) Date of the survey. [40 CFR 60.5420a(c)(15)(vii)(A)]
 - (B) Beginning and end time of the survey. [40 CFR 60.5420a(c)(15)(vii)(B)]
 - (C) Name of operator(s), training, and experience of the operator(s) performing the survey. [40 CFR 60.5420a(c)(15)(vii)(C)]
 - (D) Monitoring instrument used. [40 CFR 60.5420a(c)(15)(vii)(D)]
 - (E) Fugitive emissions component identification when Method 21 of appendix A-7 of part 60 is used to perform the monitoring survey. [40 CFR 60.5420a(c)(15)(vii)(E)]
 - (F) Ambient temperature, sky conditions, and maximum wind speed at the time of the survey. For compressor stations, operating mode of each compressor (i.e., operating, standby pressurized, and not operating-depressurized modes) at the station at the time of the survey. [40 CFR 60.5420a(c)(15)(vii)(F)]

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

- (G) Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan. [40 CFR 60.5420a(c)(15)(vii)(G)]
- (H) Records of calibrations for the instrument used during the monitoring survey. [40 CFR 60.5420a(c)(15)(vii)(H)]
- (I) Documentation of each fugitive emission detected during the monitoring survey, including the information specified in 40 CFR 60.5420a(c)(15)(vii)(I)(1) through (9). [40 CFR 60.5420a(c)(15)(vii)(I)]
 - (1) Location of each fugitive emission identified. [40 CFR 60.5420a(c)(15)(vii)(I)(1)]
 - (2) Type of fugitive emissions component, including designation as difficult-to-monitor or unsafe-to-monitor, if applicable. [40 CFR 60.5420a(c)(15)(vii)(I)(2)]
 - (3) If Method 21 of appendix A-7 of part 60 is used for detection, record the component ID and instrument reading. [40 CFR 60.5420a(c)(15)(vii)(I)(3)]
 - (4) For each repair that cannot be made during the monitoring survey when the fugitive emissions are initially found, a digital photograph or video must be taken of that component or the component must be tagged for identification purposes. The digital photograph must include the date that the photograph was taken and must clearly identify the component by location within the site (e.g., the latitude and longitude of the component or by other descriptive landmarks visible in the picture). The digital photograph or identification (e.g., tag) may be removed after the repair is completed, including verification of repair with the resurvey. [40 CFR 60.5420a(c)(15)(vii)(I)(4)]
 - (5) The date of first attempt at repair of the fugitive emissions component(s). [40 CFR 60.5420a(c)(15)(vii)(I)(5)]
 - (6) The date of successful repair of the fugitive emissions component, including the resurvey to verify repair and instrument used for the resurvey. [40 CFR 60.5420a(c)(15)(vii)(I)(6)]
 - (7) Identification of each fugitive emission component placed on delay of repair and explanation for each delay of repair. [40 CFR 60.5420a(c)(15)(vii)(I)(7)]
 - (8) For each fugitive emission component placed on delay of repair for reason of replacement component unavailability, the operator must document: the date the component was added to the delay of repair list, the date the replacement fugitive component or part thereof was ordered, the anticipated component delivery date (including any estimated shipment or delivery date provided by the vendor), and the actual arrival date of the component. [40 CFR 60.5420a(c)(15)(vii)(I)(8)]
 - (9) Date of planned shutdowns that occur while there are any components that have been placed on delay of repair. [40 CFR 60.5420a(c)(15)(vii)(I)(9)]

6. Reporting Requirements:

- a. Annual reports shall be submitted for each collection of fugitive emissions components at a compressor station that include the information specified in 40 CFR 60.5420a(b)(7). Multiple collection of fugitive emissions components at a compressor station may be included in a single annual report. [40 CFR 60.5397a(j)]

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

- b. The permittee must submit annual reports containing the information specified in 40 CFR 60.5420a(b)(1) through (8) and (12) of this section and performance test reports as specified in 40 CFR 60.5420a(b)(9) or (10), if applicable. The permittee must submit annual reports following the procedure specified in 40 CFR 60.5420a(b)(11). The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to 40 CFR 60.5410a. Subsequent annual reports are due no later than same date each year as the initial annual report. The permittee may submit one report for multiple affected facilities provided the report contains all of the information required as specified in 40 CFR 60.5420a(b)(1) through (8) and (12). The permittee may arrange with the Administrator a common schedule on which reports required by part 60 may be submitted as long as the schedule does not extend the reporting period. [40 CFR 60.5420a(b)]
- (1) The general information specified in 40 CFR 60.5420a(b)(1)(i) through (iv) is required for all reports. [40 CFR 60.5420a(b)(1)]
- (i) The company name, facility site name associated with the affected facility, and address of the affected facility. If an address is not available for the site, include a description of the site location and provide the latitude and longitude coordinates of the site in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983.
- (ii) An identification of each affected facility being included in the annual report.
- (iii) Beginning and ending dates of the reporting period.
- (iv) A certification by a certifying official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (2) For the collection of fugitive emissions components at compressor station, report the information specified in 40 CFR 60.5420a(b)(7)(i) through (iii), as applicable. [40 CFR 60.5420a(b)(7)]
- (i) (A) Designation of the type of site (i.e., well site or compressor station) at which the collection of fugitive emissions components is located. [40 CFR 60.5420a(b)(7)(i)(A)]
- (ii) For each fugitive emissions monitoring survey performed during the annual reporting period, the information specified in 40 CFR 60.5420a(b)(7)(ii)(A) through (G). [40 CFR 60.5420a(b)(7)(ii)]
- (A) Date of the survey. [40 CFR 60.5420a(b)(7)(ii)(A)]
- (B) Monitoring instrument used. [40 CFR 60.5420a(b)(7)(ii)(B)]
- (C) Any deviations from the monitoring plan elements under 40 CFR 60.5397a(c)(1), (2), and (7) and (c)(8)(i) or a statement that there were no deviations from these elements of the monitoring plan. [40 CFR 60.5420a(b)(7)(ii)(C)]
- (D) Number and type of components for which fugitive emissions were detected. [40 CFR 60.5420a(b)(7)(ii)(D)]
- (E) Number and type of fugitive emissions components that were not repaired as required in 40 CFR 60.5397a(h). [40 CFR 60.5420a(b)(7)(ii)(E)]
- (F) Number and type of fugitive emission components (including designation as difficult-to-monitor or unsafe-to-monitor, if applicable) on delay of repair and

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

explanation for each delay of repair. [40 CFR 60.5420a(b)(7)(ii)(F)]

(G) Date of planned shutdown(s) that occurred during the reporting period if there are any components that have been placed on delay of repair. [40 CFR 60.5420a(b)(7)(ii)(G)]

- c. The permittee must submit reports to the EPA via CEDRI, except as outlined in 40 CFR 60.5420a(b)(11). CEDRI can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). [40 CFR 60.5420a(b)(11)]
- d. If the permittee is required to electronically submit a report through CEDRI in the EPA's CDX, the permittee may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, the permittee must meet the requirements outlined in 40 CFR 60.5420a(b)(13)(i) through (vii). [40 CFR 60.5420a(b)(13)]
- e. If the permittee is required to electronically submit a report through CEDRI in the EPA's CDX, the permittee may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, the permittee must meet the requirements outlined in 40 CFR 60.5420a(b)(14)(i) through (v). [40 CFR 60.5420a(b)(14)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit CC#1, Cold Cleaner****Description:**

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

APPLICABLE REGULATIONS:

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

1. Operating Limitations:

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

2. Emission Limitations:

N/A

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 amount (in gallons) and type of solvent used on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

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

6. Specific Reporting Requirements:

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

7. Specific Control Equipment Operating Conditions:

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

SECTION C - INSIGNIFICANT ACTIVITIES

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

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. 30 space Heaters (0.072 mmBtu/hr each)	401 KAR 59:010, 401 KAR 63:020
2. 12,000 Gallon Condensate Tank (T1)	None
3. Maintenance Welding	None
4. Maintenance Painting	None
5. One (1) 1,200 gallons Waste Water Storage Tank (T16)	None

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. CO, NO_x, PM, SO₂, and VOC emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

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

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

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

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

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020, Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1, the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken shall be submitted to the Regional Office listed on the front of this permit. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement does not identify a specific time frame for reporting deviations, prompt reporting, as required by Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, shall be defined as follows:
 - a. For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
 - b. For emissions of any regulated air pollutant, excluding those listed in F.8.a., that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
 - c. All deviations from permit requirements, including those previously reported, shall be included in the semiannual report required by F.6.
9. Pursuant to 401 KAR 52:020, Title V permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction, or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the

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

permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

- f. The certification shall be submitted by January 30th of each year. Annual compliance certifications shall be sent to the following addresses:

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

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

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

SECTION G - GENERAL PROVISIONS1. General Compliance Requirements

- a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020, Section 3(1)(b), and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - (2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
 - (4) New requirements become applicable to a source subject to the Acid Rain Program. Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.
- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020, Section 3(1)(c)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

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

SECTION G - GENERAL PROVISIONS (CONTINUED)

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

2. Permit Expiration and Reapplication Requirements

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

3. Permit Revisions

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

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

No construction authorized by permit V-26-018.

SECTION G - GENERAL PROVISIONS (CONTINUED)**5. Testing Requirements**

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

6. Acid Rain Program Requirements

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

7. Emergency Provisions

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

SECTION G - GENERAL PROVISIONS (CONTINUED)

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

8. Ozone Depleting Substances

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

SECTION G - GENERAL PROVISIONS (CONTINUED)

9. Risk Management Provisions

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

SECTION H - ALTERNATE OPERATING SCENARIOS

N/A

SECTION I - COMPLIANCE SCHEDULE

N/A