PART 70
PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

Operating Permit Number: OP2018-062
Expiration Date: AUG 06 2023
Installation ID: 159-0047
Project Number: 2017-12-011

Installation Name and Address
Panhandle Eastern Pipe Line - Houstonia
16076 HWY T
Lamonte, MO 65337
Pettis County

Parent Company's Name and Address
Panhandle Eastern Pipe Line Co - Houstonia
7500 College Blvd., Suite 300
Overland Park KS, 66210

Installation Description:
Panhandle Eastern Pipe Line Company – Houstonia Compressor Station is a natural gas compression and interstate transmission station. Emission units include eleven (11) internal combustion, 2-stroke, lean burn, reciprocating engines ranging from 1,600 horsepower to 10,000 horsepower. Other emission units include emergency generators, storage tanks, and miscellaneous operations. The installation is major source for carbon monoxide (CO), nitrogen oxides (NOx), volatile organic compounds (VOC), and hazardous air pollutants (HAP). The installation is subject to the following federal regulations: 40 CFR part 63 Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters; and 40 CFR part 60 Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

Prepared by
Mary Evelyn Barnes
Operating Permit Unit

Director or Designee
Department of Natural Resources

AUG 06 2018
Effective Date
Table of Contents

I. INSTALLATION EQUIPMENT LISTING ..........................................................................................3
  EMISSION UNITS WITH LIMITATIONS ....................................................................................3
  EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS ..........................................................3

II. PLANT WIDE EMISSION LIMITATIONS ..................................................................................5

III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS .........................................................6
    Permit Condition MACT DDDDD ..........................................................................................6
    10 CSR 10-6.075, Maximum Achievable Control Technology Regulations ..................6
    40 CFR part 63 Subpart A, General Provisions .................................................................6
    40 CFR part 63 Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for
    Industrial, Commercial and Institutional Boilers and Process Heaters ..........................6
    Permit Condition NSPS JJJJ ...............................................................................................10
    10 CSR 10-6.070, New Source Performance Regulations ................................................10
    40 CFR part 60 Subpart A, General Provisions .................................................................10
    40 CFR part 60 Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion
    Engines ..................................................................................................................................10
    Permit Condition 0198-033 ...............................................................................................13
    10 CSR 10-6.060, Construction Permits Required .............................................................13
    Construction Permit 0198-033, Issued May 12, 1997 .......................................................13
    Permit Condition 1098-011A .............................................................................................13
    10 CSR 10-6.060, Construction Permits Required .............................................................13
    Construction Permit 1098-011A, Issued October 5, 2007 ..................................................13

IV. CORE PERMIT REQUIREMENTS ............................................................................................17

V. GENERAL PERMIT REQUIREMENTS .....................................................................................22

VI. ATTACHMENTS ....................................................................................................................27
    ATTACHMENT 0198-033 ....................................................................................................28
      Gasoline Throughput Attachment ....................................................................................28
I. Installation Equipment Listing

**EMISSION UNITS WITH LIMITATIONS**
The following list provides a description of the equipment at this installation that emits air pollutants and that are identified as having unit-specific emission limitations.

<table>
<thead>
<tr>
<th>Emission Unit #</th>
<th>Description of Emission Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>828</td>
<td>Emergency Generator</td>
</tr>
<tr>
<td>829</td>
<td>Emergency Generator</td>
</tr>
<tr>
<td>T-17</td>
<td>Storage Tank, 150 gallon capacity, contains gasoline</td>
</tr>
<tr>
<td>SH-1</td>
<td>Process Heater, Natural gas fired, 0.25 MMBtu/hr</td>
</tr>
<tr>
<td>SH-2</td>
<td>Process Heater, Natural gas fired, 0.1 MMBtu/hr</td>
</tr>
<tr>
<td>SH-3</td>
<td>Process Heater, Natural gas fired, 1 MMBtu/hr</td>
</tr>
<tr>
<td>SH-4</td>
<td>Process Heater, Natural gas fired, 0.5 MMBtu/hr</td>
</tr>
</tbody>
</table>

**EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS**
The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

<table>
<thead>
<tr>
<th>Emission Unit #</th>
<th>Description of Emission Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP - 811</td>
<td>1,600 hp I/C engine, natural gas fueled, 2-cycle lean burn (1947)</td>
</tr>
<tr>
<td>EP - 812</td>
<td>1,600 hp I/C engine, natural gas fueled, 2-cycle lean burn (1950)</td>
</tr>
<tr>
<td>EP - 813</td>
<td>1,760 hp I/C engine, natural gas fueled, 2-cycle lean burn (1951)</td>
</tr>
<tr>
<td>EP - 815</td>
<td>3,400 hp I/C engine, natural gas fueled, 2-cycle lean burn (1965)</td>
</tr>
<tr>
<td>EP - 816</td>
<td>3,400 hp I/C engine, natural gas fueled, 2-cycle lean burn (1965)</td>
</tr>
<tr>
<td>EP - 817</td>
<td>10,000 hp I/C engine, natural gas fueled, 2-cycle lean burn (1968)</td>
</tr>
<tr>
<td>T-1</td>
<td>Storage tank, 10,000 gallon capacity, Engine lube oil</td>
</tr>
<tr>
<td>T-2</td>
<td>Storage tank, 2,000 gallon capacity, Lube oil</td>
</tr>
<tr>
<td>T-3</td>
<td>Storage tank, 2,000 gallon capacity, glycol</td>
</tr>
<tr>
<td>T-4</td>
<td>Storage tank, 700 gallon capacity, glycol</td>
</tr>
<tr>
<td>T-5</td>
<td>Storage tank, 700 gallon capacity, Lube oil</td>
</tr>
<tr>
<td>T-6</td>
<td>Storage tank, 8,400 gallon capacity, glycol</td>
</tr>
<tr>
<td>T-7</td>
<td>Storage tank, 9,450 gallon capacity, pipeline liquids</td>
</tr>
<tr>
<td>T-8</td>
<td>Storage tank, 10,405 gallon capacity, pipeline liquids</td>
</tr>
<tr>
<td>T-9</td>
<td>Storage tank, 7,258 gallon capacity, Lube oil</td>
</tr>
<tr>
<td>T-10</td>
<td>Storage tank, 3,788 gallon capacity, glycol</td>
</tr>
<tr>
<td>T-11</td>
<td>Storage tank, 2,000 gallon capacity, Lube oil</td>
</tr>
<tr>
<td>T-16</td>
<td>Storage tank, 3,000 gallon capacity, Used oil</td>
</tr>
<tr>
<td>T-18</td>
<td>Storage tank, 150 gallon capacity, Diesel</td>
</tr>
<tr>
<td>T-19</td>
<td>Storage tank, 10,000 gallon capacity, Wastewater</td>
</tr>
<tr>
<td>T-20</td>
<td>Storage tank, 200,000 gallon capacity, Wastewater</td>
</tr>
<tr>
<td>T-21</td>
<td>Storage tank, 3,000 gallon capacity, Oily wastewater</td>
</tr>
<tr>
<td>T-22</td>
<td>Storage tank, 600 gallon capacity, Glycol/water</td>
</tr>
<tr>
<td>T-33</td>
<td>Storage tank, 3,000 gallon capacity, Oily wastewater</td>
</tr>
<tr>
<td>T-34</td>
<td>Storage tank, 1,870 gallon capacity, wastewater/wash pit</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>T-35</td>
<td>Storage tank, 110 gallon capacity, Diesel</td>
</tr>
<tr>
<td>T-38</td>
<td>Storage tank, 2,066 gallon capacity, Pipeline liquids</td>
</tr>
<tr>
<td>T-44</td>
<td>Storage tank, 100 gallon capacity, Used oil</td>
</tr>
<tr>
<td>T-24-1</td>
<td>Storage tank, 3,400 gallon capacity, Wastewater</td>
</tr>
<tr>
<td>T-24-2</td>
<td>Storage tank, 3,400 gallon capacity, Wastewater</td>
</tr>
<tr>
<td>T-24-3</td>
<td>Storage tank, 3,400 gallon capacity, Wastewater</td>
</tr>
<tr>
<td>T-24-4</td>
<td>Storage tank, 3,400 gallon capacity, Wastewater</td>
</tr>
<tr>
<td>T-25</td>
<td>Storage tank, 318 gallon capacity, Used lube oil</td>
</tr>
<tr>
<td>T-26</td>
<td>Storage tank, 3,100 gallon capacity, Pipeline liquids</td>
</tr>
<tr>
<td>PW</td>
<td>Parts Washer, 34 gallon capacity, Safety Kleen, SK Solvent</td>
</tr>
<tr>
<td>TLOAD</td>
<td>Truck Loading, 150 gallons/hr, loading from T-17</td>
</tr>
</tbody>
</table>
II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The plant wide conditions apply to all emission units at this installation. This section applies to regulations that apply on an entire-installation wide basis. The following general conditions apply to all units contained in this permit, unless stated otherwise.

Monitoring:
The permittee shall calibrate, maintain and operate all pollution control devices and pollution monitoring related instruments according to the manufacturer’s recommendations, or maintenance and operational history of similar units. All calibrations, maintenance, and operations shall occur according to good engineering practices. All manufacturing specifications and operational/maintenance histories shall be kept on site.

Recordkeeping:
1) The permittee shall record all required record keeping in an appropriate format.
2) Records may be kept electronically using database or workbook systems, as long as all required information is readily available for compliance determinations.
3) The permittee shall keep a copy of this operating permit and review, copies of all issued construction permits and reviews, and copies of all Safety Data Sheets (SDS) on site.
4) All records must be kept for a minimum of 5 years and be made available to department personnel upon request.

Performance Testing:
When performance testing is required by a condition of this permit, one electronic copy of a written report of the performance test results shall be submitted to stacktesting@dnr.mo.gov within the timeframe required by the regulation that requires the testing. If no time frame is specified, the report shall be submitted within sixty days. The report shall include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required U.S. EPA Method for at least one sample run.

Reporting:
1) The permittee shall report any exceedance of any of the terms imposed by this permit, or any malfunction which could cause an exceedance of any of the terms imposed by this permit, no later than ten days after the exceedance or event causing the exceedance (unless otherwise specified in the specific condition). For limits based on a consecutive 12-month period, these reports shall be submitted no later than ten (10) days after the end of the month during which the exceedance occurred.
2) The permittee shall report any deviations from the monitoring, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification.
3) All reports and certifications shall be submitted to the Air Pollution Control Program’s Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov.
III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

<table>
<thead>
<tr>
<th>2016 EP#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SH-1</td>
<td>Process Heater, Natural gas fired, 0.25 MMBtu/hr</td>
</tr>
<tr>
<td>SH-2</td>
<td>Process Heater, Natural gas fired, 0.1 MMBtu/hr</td>
</tr>
<tr>
<td>SH-3</td>
<td>Process Heater, Natural gas fired, 1 MMBtu/hr</td>
</tr>
<tr>
<td>SH-4</td>
<td>Process Heater, Natural gas fired, 0.5 MMBtu/hr</td>
</tr>
</tbody>
</table>

**Permit Condition MACT DDDDD**

10 CSR 10-6.075, Maximum Achievable Control Technology Regulations
40 CFR part 63 Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters

**Work Practice Standards:**

1) At all times, the permittee must operate and maintain any affected source, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the director that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [§63.7500(a)(3)]

2) The permittee shall complete a tune-up every 5 years as specified in §63.7540. The permittee is not subject to the emission limits in Subpart DDDDD, Tables 1 and 2 or 11 through 13, or the operating limits in Table 4. [§63.7500(e)]

**General Compliance Requirements:**

1) The permittee must be in compliance with the work practice standards in this subpart. [§63.7505(a)]

**Continuous Compliance Requirements:**

1) The permittee must conduct a 5-year performance tune-up according to §63.7540(a) (12). Each 5-year tune-up specified in §63.7540(a) (12) must be conducted no more than 61 months after the previous tune-up. [§63.7515(d)]

2) The permittee must demonstrate continuous compliance with the work practice standards in Table 3 to this subpart that applies according to the methods specified in §63.7540(a) (1) through (19). [§63.7540(a)]

Table 3 to Subpart DDDDD of Part 63—Work Practice Standards

<table>
<thead>
<tr>
<th>If your unit is . . .</th>
<th>You must meet the following . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A existing process heater with a heat input capacity of less than or equal to 5 million Btu per hour in any of the following subcategories: unit designed to burn gas 1.</td>
<td>Conduct a tune-up of the boiler or process heater every 5 years as specified in §63.7540.</td>
</tr>
</tbody>
</table>
3) The permittee must conduct a tune-up of the boiler or process heater every 5 years as specified in §63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. The permittee may delay the burner inspection specified in §63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72 months. [§63.7540(a)(12)]

a) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment; [§63.7540(a)(10)(i)]

b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer’s specifications, if available; [§63.7540(a)(10)(ii)]

c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). [§63.7540(a)(10)(iii)]

d) Optimize total emissions of CO. This optimization should be consistent with the manufacturer’s specifications, if available, and with any NOx requirement to which the unit is subject; [§63.7540(a)(10)(iv)]

e) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and [§63.7540(a)(10)(v)]

f) Maintain on-site and submit, if requested by the director, a report containing the information in §63.7540(a)(10)(vi)(A) through (C). [§63.7540(a)(10)(vi)]

i) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater; [§63.7540(a)(10)(vi)(A)]

ii) A description of any corrective actions taken as a part of the tune-up. [§63.7540(a)(10)(vi)(B)]

4) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [§63.7540(a)(13)]

**General Provisions:**

1) The permittee shall comply with §§63.1 through 63.15 as applicable in Table 10 of 40 CFR 63 Subpart DDDDD.

**Notifications, Reports, and Records:**

1) The permittee must submit to the director all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply by the dates specified. [§63.7454(a)]

2) The permittee must submit each report in Table 9 to this subpart that applies. [§63.7550(a)]

3) The permittee may submit only a 5-year compliance report, as specified in §63.7550(b)(1) through (4), instead of a semi-annual compliance report. [§63.7550(b)]

a) Each subsequent 5-year compliance report must cover the applicable 5-year period from January 1 to December 31. [§63.7550(b)(3)]
b) Each subsequent 5-year compliance report must be postmarked or submitted no later than January 31. [§63.7550(b)(4)]

c) For each affected source that is subject to permitting regulations pursuant to part 70 of this chapter, and if the permitting authority has established dates for submitting semiannual reports pursuant to 70.6(a)(3)(iii)(A), the permittee may submit the subsequent compliance reports according to the dates the permitting authority has established in the permit instead of according to the dates in §63.7550(b)(1) through (4). [§63.7550(b)(5)]

4) A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule. [§63.7550(c)]

a) The permittee must submit a compliance report with the information in §63.7550(c)(5)(i) through (iii), (xiv) and (xvii). [§63.7550(c)(1)]
   i) Company and facility name and address. [§63.75850(c)(5)(i)]
   ii) Process unit information. [§63.7550(c)(5)(ii)]
   iii) Date of report and beginning and ending dates of the reporting period. [§63.7550(c)(5)(iii)]
   iv) The total operating time during the reporting period. [§63.7550(c)(5)(iv)]

b) If a malfunction occurred during the reporting period, the report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period. The report must also include a description of actions taken by the permittee during a malfunction of a process heater to minimize emissions in accordance with §63.7500(a)(3), including actions taken to correct the malfunction. [§63.7550(c)(5)(xiii)]

c) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct a 5-year tune-up according to §63.7540(a)(12). Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. [§63.7550(c)(5)(xv)]

d) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [§63.7550(c)(5)(xvii)]

e) For each instance of startup or shutdown include the information required to be monitored, collected, or recorded according to the requirements of §63.7555(d). [§63.7550(c)(5)(xviii)]

5) For each deviation from the work practice standards for periods of startup and shutdown, the compliance report must additionally contain the information required in §63.7550(d)(1) through (3). [§63.7550(d)]

a) A description of the deviation and which work practice standard from which the permittee deviated. [§63.7550(d)(1)]

b) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken. [§63.7550(d)(2)]

6) The permittee must submit the reports according to the procedures specified in §63.7550(h)(1) through (3). [§63.7550(h)]

a) The permittee must submit all reports required by Table 9 of this subpart electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The permittee must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/tnn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in §63.13. The permittee must begin submitting
Table 9 to Subpart DDDDD of Part 63—Reporting Requirements

<table>
<thead>
<tr>
<th>You must submit a</th>
<th>The report must contain . . .</th>
<th>You must submit the report . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Compliance report</td>
<td>a. Information required in §63.7550(c)(1) through (5); and</td>
<td>Every 5 years according to the requirements in §63.7550(b).</td>
</tr>
<tr>
<td></td>
<td>b. If there are no deviations from the requirements for work practice standards for periods of startup and shutdown in Table 3 to this subpart that apply to the permittee, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. If the permittee has a deviation from a work practice standard for periods of startup and shutdown, during the reporting period, the report must contain the information in §63.7550(d).</td>
<td></td>
</tr>
</tbody>
</table>

7) The permittee must keep records according to §63.7555(a)(1) and (2). [§63.7555(a)]
   a) A copy of each notification and report that was submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that was submitted, according to the requirements in §63.10(b)(2)(xiv). [§63.7555(a)(1)]
   b) Records of compliance demonstrations and performance evaluations as required in §63.10(b)(2)(viii). [§63.7555(a)(2)]
8) The permittee’s records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). [§63.7560(a)]
9) As specified in §63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§63.7560(b)]
10) The permittee must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. [§63.7560(c)]
Permit Condition NSPS JJJJ
10 CSR 10-6.070, New Source Performance Regulations
40 CFR part 60 Subpart A, General Provisions
40 CFR part 60 Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

<table>
<thead>
<tr>
<th>2016 EP#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>828</td>
<td>Emergency Generator, 637 HP, Natural gas fired unit, 4 stroke lean burn, manufactured 2011, Mfr: Caterpillar, Model: G3412C LE</td>
</tr>
<tr>
<td>829</td>
<td>Emergency Generator, 637 HP, Natural gas fired unit, 4 stroke lean burn, manufactured 2011, Mfr: Caterpillar, Model: G3412C LE</td>
</tr>
</tbody>
</table>

**Emission Limitations:**
1) The permittee must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. [§60.4233(e)]

<table>
<thead>
<tr>
<th>Engine type and fuel</th>
<th>Maximum engine power</th>
<th>Emission standardsa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>g/HP-hr</td>
<td>ppmvd at 15% O2</td>
</tr>
<tr>
<td>Emergency</td>
<td>NOx</td>
<td>CO</td>
</tr>
<tr>
<td>HP=130</td>
<td>2.0</td>
<td>4.0</td>
</tr>
</tbody>
</table>

aFor purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

2) The permittee must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine. [§60.4233]

**Monitoring:**
1) The permittee must install a non-resettable hour meter. [§60.4237(a)]

**Compliance Requirements:**
1) The permittee must demonstrate compliance according to one of the methods specified in §60.4243(b)(1) and (2). [§60.4243(b)]
   a) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in §60.4243(a). [§60.4243(b)(1)]
   b) If the permittee operates and maintains the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the permittee must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. The permittee must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply. If the permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the stationary SI internal combustion engine will not be considered out of compliance. [§60.4243(a)(1)]
   c) If the permittee does not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the permittee shall comply with the provisions of §60.4243(a)(2).
2) The permittee must operate the emergency stationary ICE according to the requirements in §60.4243 (d)(1) through (3). In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in §60.4243(d)(1) through (3), is prohibited. If the permittee does not operate the engine according to the requirements in §60.4243(d)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. [§60.4243(d)]

a) There is no time limit on the use of emergency stationary ICE in emergency situations. [§60.4243(d)(1)]

b) The permittee may operate the emergency stationary ICE for any combination of the purposes specified in §60.4243(d)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by §60.4243(d)(3) counts as part of the 100 hours per calendar year allowed by §60.4243(d)(2). [§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 director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [§60.4243(d)(2)(i)]

ii) 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 and emergency demand response provided in §60.4243(d)(2). Except as provided in §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. [§60.4243(d)(3)]

iii) 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: [§60.4243(d)(3)(i)]

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

E. The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee. [§60.4243(d)(3)(i)(E)]
3) The permittee may operate their natural gas fired engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the permittee is required to conduct a performance test to demonstrate compliance with the emission standards of §60.4233. [§60.4243(e)]

General Provisions:
The permittee shall comply with §§60.1 through 60.19 as applicable in Table 3 of 40 CFR 60 Subpart JJJJ. [§60.4246]

Notification, Reports, and Records:
1) The permittee must keep records of the information in §60.4245(a)(1) through (4). [§60.4245(a)]
   a) All notifications submitted to comply with this subpart and all documentation supporting any notification. [§60.4245(a)(1)]
   b) Maintenance conducted on the engine. [§60.4245(a)(2)]
   c) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable. [§60.4245(a)(3)]
   d) 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 §60.4243(a)(2), documentation that the engine meets the emission standards. [§60.4245(a)(4)]

2) 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. [§60.4245(b)]

3) If the permittee operates for the purposes specified in §60.4243(d)(3)(i), the permittee must submit an annual report according to the requirements in §60.4245(e)(1) through (3). [§60.4245(e)]
   a) The report must contain the following information: [§60.4245(e)(1)]
   b) Company name and address where the engine is located. [§60.4245(e)(1)(i)]
   c) Date of the report and beginning and ending dates of the reporting period. [§60.4245(e)(1)(ii)]
   d) Engine site rating and model year. [§60.4245(e)(1)(iii)]
   e) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place. [§60.4245(e)(1)(iv)]
   f) Hours spent for operation for the purposes specified in §60.4243(d)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4243(d)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine. [§60.4245(e)(1)(vii)]
   g) Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. [§60.4245(e)(2)]
   h) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA’s Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4. [§60.4245(e)(3)]
Panhandle Eastern Pipe Line - Houstonia
Installation ID: 159-0047
Project No. 2017-12-011

Permit Condition 0198-033
10 CSR 10-6.060, Construction Permits Required
Construction Permit 0198-033, Issued May 12, 1997

<table>
<thead>
<tr>
<th>2016 EP#</th>
<th>Description</th>
<th>Tank capacity (gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-17</td>
<td>Storage tank, Gasoline</td>
<td>150</td>
</tr>
</tbody>
</table>

Operational Limitation:
1) The permittee shall not exceed a throughput of 5,000 gallons of unleaded gasoline in the tank listed above in any consecutive 12-month period. [Special Condition # 1]

Monitoring/Recordkeeping:
1) The permittee shall monitor and record the monthly and consecutive 12-month throughput of unleaded gasoline.
2) The permittee shall use Attachment 0198-033, or an equivalent, to demonstrate compliance.

Permit Condition 1098-011A
10 CSR 10-6.060, Construction Permits Required
Construction Permit 1098-011A, Issued October 5, 2007

<table>
<thead>
<tr>
<th>2016 EP#</th>
<th>Description (Construction Date)</th>
<th>Make/Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP# 819</td>
<td>Reciprocating Engine 819, 2,000 HP, Natural gas fired unit, 2 stroke lean burn, (1988)</td>
<td></td>
</tr>
<tr>
<td>EP# 821</td>
<td>Reciprocating Engine 821, 2,000 HP, Natural gas fired unit, 2 stroke lean burn, (1988)</td>
<td></td>
</tr>
</tbody>
</table>

Emission Limitations:
1) For EP# 818: The permittee shall achieve the following Best Available Control Technology (BACT) limitations for this emission unit:
   a) Nitrogen Oxide (NOₓ): 2.5 grams/horsepower – hour (g/hp-hr), corrected to 15 percent oxygen on a dry basis, at 100% torque. [Special Condition 2.A.]
   b) Carbon Monoxide (CO): 2.1 g/hp-hr, corrected to 15 percent oxygen on a dry basis, at 100% torque. [Special Condition 2.B.]
2) For EP# 819, EP# 820, EP# 821: The permittee shall achieve the following BACT limitations for these emission units:
   a) NOₓ: 2.0 g/hp-hr, corrected to 15 percent oxygen on a dry basis, at 100% torque. [Special Condition 1.A.]
   b) CO: 2.1 g/hr-hr, corrected to 15 percent oxygen on a dry basis, at 100% torque. [Special Condition 1.B.]

Operational Limitation:
1) The permittee shall use natural gas as the only fuel fired in EP# 818, EP# 819, EP# 820, and EP# 821. [Special Condition 5.A.]
**Performance Testing Requirements:**

1) The permittee shall perform annual (once per calendar year) testing on each modified engine to verify that the emission limitations are not exceeded. This testing may be conducted either in the same manner as the original performance test or using a portable test analyzer. For the on-going emission testing with portable test analyzers, the permittee will follow the procedures of 2.c., 2.d., and 2.e. below. [Special Condition 3.B.]

2) The applicable test methods and procedures are:
   
a) The test methods and procedures outlined at 40 CFR Part 60, Appendix A, Method 7E shall be adhered to by the permittee in testing for NOx. [Special Condition 4.A.]
   
b) The test methods and procedures outlined at 40 CFR Part 60, Appendix A, Method 10 shall be adhered to by the permittee in testing for CO. [Special Condition 4.B.]
   
c) The date on which performance tests are conducted must be pre-arranged with the Air Pollution Control Program (APCP) a minimum of 30-days prior to the proposed test date so that this Program may arrange a pretest meeting, if necessary, to assure that the test date is acceptable for an observer to be present. A completed Proposed Test Plan form may serve the purpose of notification and must be approved by the APCP prior to conducting the required emission testing. [Special Condition 4.C.]
   
d) Two (2) copies of a written report of the performance test results shall be submitted to the director of the APCP within 30-days of completion of any required testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required Environmental Protection Agency (EPA) Method for at least one (1) sample run. [Special Condition 4.D.]
   
e) The test report is to fully account for all operational and emission parameters addressed both in the permit conditions as well as in any other applicable state or federal rules or regulations. [Special Condition 4.E.]

3) Annual Testing Requirements for Parameter Verification: Based upon the date of the completed initial testing, the permittee shall perform annual (once per calendar year) portable analyzer NOx emission tests on one engine of each model type using the specified test methods. For engine groups comprised of two (2) or more engines, a different engine form each engine group shall be tested each year. If the tested hourly NOx emissions are greater than the applicable limits imposed by this permit condition, the permittee shall determine if the reason is due to a malfunction of the engine or monitoring equipment. [Special Conditions 6.A. and 6.B.]
   
a) If due to a malfunction, the equipment shall be repaired, and the unit re-tested.
   
b) If due to inaccuracies in the correlation equation, testing using EPA Method 7E shall be repeated to re-establish the correlation between engine operating parameters and NOx emissions for that engine using the Parameter Establishment Procedures below.
   
c) Parameter Establishment Procedures- The permittee shall perform a minimum of nine (9) stack test runs to establish a correlation between engine operating parameters and NOx emissions for each engine (EP# 818 – EP# 821) using the following equation and constants A, B, and C referenced below:

   \[
   AMP_{SP} = \frac{AF_{ST} \times FSG \times FFRPM \times (AMT + 460)}{17.329 \times TER_{SP} \times V_{TRAP}} - 29.99
   \]

   Where:
   
   FFRPM = Fuel Flow per Revolution (scf/rev)
   AMT = Air Manifold Temperature (°F)
   TER_{SP} = Trapped Equivalence Ratio Setpoint
   FSG = Fuel Gas Specific Gravity
\[ AF_{ST} = \text{Stoichiometric Air/Fuel Ratio} \]
\[ V_{TRAP} = \text{Engine Trapped Volume (ft}^3) \]
\[ AMP_{SP} = \text{Air Manifold Pressure (in Hg)} \]

And:
\[ FFRPM = \frac{FF_{SCFM}}{RPM} \]

Where:
\[ FF_{SCFM} = \text{Unit Flow Rate (SCFM)} \]
\[ RPM = \text{Unit Speed (RPM)} \]

And:
\[ TER_{SP} = A \times (FFRPM)^2 + B \times FFRPM + C \]

Where A, B, and C are constants determined upon performance testing.

**Monitoring/Recordkeeping:**

1) NO\textsubscript{x} Continuous Compliance Assurance-The permittee shall install, maintain, and operate a parametric emission monitoring system. The monitoring system shall collect at a minimum four (4) or more data values equally spaced over each hour and record the operating parameters at the specified frequencies as shown in the following table: [Special Condition 6.C.]

<table>
<thead>
<tr>
<th>Operating Parameter</th>
<th>Unit</th>
<th>Recording Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Flow (FF\textsubscript{SCFM})</td>
<td>SCFM</td>
<td>Hourly</td>
</tr>
<tr>
<td>Engine Speed</td>
<td>RPM</td>
<td>Hourly</td>
</tr>
<tr>
<td>Air Manifold Temperature (AMT)</td>
<td>degrees F</td>
<td>Hourly</td>
</tr>
<tr>
<td>Setpoint Trapped Equivalence Ratio (TER\textsubscript{SP})</td>
<td>dimensionless</td>
<td>Hourly</td>
</tr>
<tr>
<td>Engine Trapped Volume (V\textsubscript{TRAP})</td>
<td>ft\textsuperscript{3}</td>
<td>Hourly</td>
</tr>
<tr>
<td>Actual Air Manifold Pressure (AMP\textsubscript{ACT})</td>
<td>inches of Hg</td>
<td>Hourly</td>
</tr>
<tr>
<td>Air Manifold Pressure (AMP\textsubscript{SP})</td>
<td>inches of Hg</td>
<td>Hourly</td>
</tr>
</tbody>
</table>

2) If the average of three (3) consecutive hourly readings of actual air manifold pressure (AMP\textsubscript{ACT}) of any one unit is less than the calculated air manifold pressure (AMP\textsubscript{SP}) for that unit three times during any year, then the permittee shall determine if the reason is due to a malfunction of the engine or monitoring equipment. [Special Condition 6.D.]

a) If due to a malfunction, the equipment shall be repaired, and the unit re-tested using the procedures and methods as previously described under the Annual Testing Requirements for Parameter Verification.

b) If due to inaccuracies in the correlation equation, testing shall be repeated to re-establish the correlation between engine operating parameters and NOx emissions for that engine, as described in the Parameter Establishment Procedures above. Testing shall be completed and results submitted to the Missouri Department of Natural Resources, Air Pollution Control Program within 90 days of the third occurrence.
**Reporting:**

1) Two (2) copies of a written report of the performance test results shall be submitted to the Director of the Air Pollution Control Program within thirty (30) days of completion of any required testing. The reports must include legible copies of the raw data sheets, analytical instrument laboratory data and complete sample calculations from the required Environmental Protection Agency (EPA) Method for at least one (1) sample run. [Special Condition 4.D.]

2) The test report is to fully account for all operational and emission parameters addressed both in the permit conditions, as well as, in any other applicable state or federal rules or regulations. [Special Condition 4.E.]

3) The permittee shall report to the Air Pollution Control Program’s Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, no later than ten (10) days after the average of three (3) consecutive hourly readings of actual air manifold pressure (AMP\textsubscript{ACT}) of any one (1) unit is less than the calculated air manifold pressure (AMP\textsubscript{SP}) for that unit three (3) times during any year. [Special Condition 6.E.]
IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR), the Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The following are only excerpts from the regulation or code, and are provided for summary purposes only.

10 CSR 10-6.045 Open Burning Requirements
1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
2) Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions
1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
   a) Name and location of installation;
   b) Name and telephone number of person responsible for the installation;
   c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
   d) Identity of the equipment causing the excess emissions;
   e) Time and duration of the period of excess emissions;
   f) Cause of the excess emissions;
   g) Air pollutants involved;
   h) Estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
   i) Measures taken to mitigate the extent and duration of the excess emissions; and
   j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
2) The permittee shall submit the paragraph 1 information to the director in writing at least ten days prior to any maintenance, start-up or shutdown activity which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, notice shall be given as soon as practicable prior to the activity.
3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent...
and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.

4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.

5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required
The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits
The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. The permittee shall retain the most current operating permit issued to this installation on-site. The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.

The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.

10 CSR 10-6.100 Alternate Emission Limits
Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

10 CSR 10-6.110 Reporting of Emission Data, Emission Fees and Process Information
1) The permittee shall submit a Full Emissions Report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as a spreadsheet file, can be submitted for approval by the director.

2) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.

3) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.165 Restriction of Emission of Odors

This requirement is a State Only permit requirement.

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour. This odor evaluation shall be taken at a location outside of the installation’s property boundary.

10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

Emission Limitation:

1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.

2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.

3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
   a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
   b) Paving or frequent cleaning of roads, driveways and parking lots;
   c) Application of dust-free surfaces;
   d) Application of water; and
   e) Planting and maintenance of vegetative ground cover.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good
professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.

2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.

3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

**10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements**

This requirement is a State Only permit requirement.
The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees.

**10 CSR 10-6.280 Compliance Monitoring Usage**

1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
   a) Monitoring methods outlined in 40 CFR Part 64;
   b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, “Operating Permits”, and incorporated into an operating permit; and
   c) Any other monitoring methods approved by the director.

2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at an installation:
   a) Monitoring methods outlined in 40 CFR Part 64;
   b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, “Operating Permits”, and incorporated into an operating permit; and
   c) Compliance test methods specified in the rule cited as the authority for the emission limitations.

3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
   a) Applicable monitoring or testing methods, cited in:
      i) 10 CSR 10-6.030, “Sampling Methods for Air Pollution Sources”;
      ii) 10 CSR 10-6.040, “Reference Methods”; 
      iii) 10 CSR 10-6.070, “New Source Performance Standards”; 
      iv) 10 CSR 10-6.080, “Emission Standards for Hazardous Air Pollutants”; or
   b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.
40 CFR Part 82 Protection of Stratospheric Ozone (Title VI)

1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
   a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR §82.106.
   b) The placement of the required warning statement must comply with the requirements of 40 CFR §82.108.
   c) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR §82.110.
   d) No person may modify, remove, or interfere with the required warning statement except as described in 40 CFR §82.112.

2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B of 40 CFR Part 82:
   a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices described in 40 CFR §82.156.
   b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment described in 40 CFR §82.158.
   c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR §82.161.
   d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with the record keeping requirements of 40 CFR §82.166. ("MVAC-like" appliance as defined at 40 CFR §82.152).
   e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR §82.156.
   f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR §82.166.

3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements contained in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. Federal Only - 40 CFR Part 82.
V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

<table>
<thead>
<tr>
<th>10 CSR 10-6.065(6)(C)1.B Permit Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 CSR 10-6.065(6)(E)3.C Extension of Expired Permits</td>
</tr>
</tbody>
</table>

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed. If a timely and complete application for a permit renewal is submitted, but the Air Pollution Control Program fails to take final action to issue or deny the renewal permit before the end of the term of this permit, this permit shall not expire until the renewal permit is issued or denied.

<table>
<thead>
<tr>
<th>10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements</th>
</tr>
</thead>
</table>

1) Record Keeping
   a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
   b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources’ personnel upon request.

2) Reporting
   a) All reports shall be submitted to the Air Pollution Control Program, Compliance and Enforcement Section, P. O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov.
   b) The permittee shall submit a report of all required monitoring by:
      i) October 1st for monitoring which covers the January through June time period, and
      ii) April 1st for monitoring which covers the July through December time period.
   c) Each report shall identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
   d) Submit supplemental reports as required or as needed. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
      i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice
must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

   ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

   iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in this permit.

e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.

f) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)
If the installation is required to develop and register a risk management plan pursuant to Section 112(R) of the Act, the permittee will verify that it has complied with the requirement to register the plan.

10 CSR 10-6.065(6)(C)1.F Severability Clause
In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

10 CSR 10-6.065(6)(C)1.G General Requirements
1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.

2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.

5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.
10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios

None

10 CSR 10-6.065(6)(C)3 Compliance Requirements

1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.

2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation’s right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
   a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
   b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
   c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
   d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.

3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
   a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
   b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.

4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
   a) The identification of each term or condition of the permit that is the basis of the certification;
   b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
   c) Whether compliance was continuous or intermittent;
   d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065(6)(C)6 Permit Shield

1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
   a) The applicable requirements are included and specifically identified in this permit, or
   b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.

2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
   a) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
   b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
   c) The applicable requirements of the acid rain program,
   d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
   e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

10 CSR 10-6.065(6)(C)7 Emergency Provisions

1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
   a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
   b) That the installation was being operated properly,
   c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
   d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.

2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(6)(C)8 Operational Flexibility

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd.,
Lenexa, KS 66219, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

1) Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), record keeping, reporting or compliance requirements of the permit.

a) Before making a change under this provision, the permittee shall provide advance written notice to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the APCP shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the APCP as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the APCP as soon as possible after learning of the need to make the change.

b) The permit shield shall not apply to these changes.

10 CSR 10-6.065(6)(C)9 Off-Permit Changes

1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the permit, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:

a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;

b) The permittee must provide contemporaneous written notice of the change to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3 of this rule. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.

c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and

d) The permit shield shall not apply to these changes.

10 CSR 10-6.020(2)(R)34 Responsible Official

The application utilized in the preparation of this permit was signed by Jim Kerns, Vice President of Operations. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting
affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

### 10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause

This permit shall be reopened for cause if:

1) The Missouri Department of Natural Resources (MoDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,

2) MoDNR or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,

3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
   a) The permit has a remaining term of less than three years;
   b) The effective date of the requirement is later than the date on which the permit is due to expire;
   or
   c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,

4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or

5) MoDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

### 10 CSR 10-6.065(6)(E)1.C Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

### VI. Attachments

Attachments follow.
### Attachment 0198-033
Gasoline Throughput Attachment

<table>
<thead>
<tr>
<th>Month</th>
<th>Amount of gasoline throughput (gallons)</th>
<th>Consecutive 12-month total of gasoline throughput (gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Compliance is demonstrated when the total amount of gasoline throughput is less than 5,000 gallons in any consecutive twelve month period.

Start-up, shutdown, and malfunction emissions as reported to the Air Pollution Control Program’s Compliance/Enforcement Section during the most recent 12 month period must be included in the rolling total.
STATEMENT OF BASIS

INSTALLATION DESCRIPTION

Panhandle Eastern Pipe Line Company – Houstonia Compressor Station is a natural gas compression and interstate transmission station. Emission units include eleven (11) internal combustion, 2-stroke, lean burn, reciprocating engines ranging from 1,600 horsepower to 10,000 horsepower. Other emission units include emergency generators, storage tanks, and miscellaneous operations. The installation is a major source for carbon monoxide (CO), nitrogen oxides (NOx), volatile organic compounds (VOC), and hazardous air pollutants (HAP). The installation is subject to the following federal regulations: 40 CFR part 63 Subpart DDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters; 40 CFR part 60 Subpart JJJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

The most recent five (5) years of reported actual emissions and the installation’s potential to emit (PTE) appears in Table 1 below. Potential emissions include emissions from all compressor engines, two (2) emergency generators and four (4) process heaters. The other emission units are not included in the PTE below. Compressor engine emissions are based on emission factors from SCC 20200252, with the exception of carbon monoxide (CO) and nitrogen oxides (NOx) on engines EP# 818 through EP# 821. These engines have federally-enforceable limits for CO and NOx under construction permit 1098-011A, which were used to calculate the potential emissions. The emergency generators emissions are based on emission factors from SCC 20200254, and are based on 500 hours of operation per year per engine. The process heater emissions are based on emission factors from SCC 10200603 and are based on year round operation (8760 hours/year).

Since issuance of the previous operating permit, the installation has removed the following equipment:

<table>
<thead>
<tr>
<th>EP#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-12</td>
<td>Storage tank, 2,066 gallon capacity, contained pipeline liquids</td>
</tr>
<tr>
<td>T-23</td>
<td>Storage tank, 500 gallon capacity, contained pipeline liquids</td>
</tr>
</tbody>
</table>

Since issuance of the previous operating permit, the permittee informed the Air Pollution Control Program on April 18, 2018, that the following three (3) pieces of equipment have been permanently removed from the installation:

<table>
<thead>
<tr>
<th>EP#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-13</td>
<td>Storage tank, 600 gallon capacity, Glycol/water</td>
</tr>
<tr>
<td>T-14</td>
<td>Storage tank, 500 gallon capacity, Air compressor liquids</td>
</tr>
<tr>
<td>827</td>
<td>Emergency Generator, 544 HP, Natural gas fired unit, 4 stroke lean burn, manufactured 2011, Mfr: Ingersoll Rand, Model: PSVG-8</td>
</tr>
</tbody>
</table>
Panhandle Eastern Pipe Line - Houstonia  
Installation ID: 159-0047  
Project No. 2017-12-011

Table 1: Emissions Profile, tons per year

<table>
<thead>
<tr>
<th>Pollutants</th>
<th>Reported Emissions</th>
<th>Potential Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2013</td>
<td>2014</td>
</tr>
<tr>
<td>Particulate Matter ≤ Ten Microns (PM10)</td>
<td>35.28</td>
<td>36.00</td>
</tr>
<tr>
<td>Particulate Matter ≤ 2.5 Microns (PM2.5)</td>
<td>35.28</td>
<td>36.00</td>
</tr>
<tr>
<td>Sulfur Oxides (SOx)</td>
<td>0.43</td>
<td>0.44</td>
</tr>
<tr>
<td>Nitrogen Oxides (NOx)</td>
<td>1660.77</td>
<td>1598.21</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOC)</td>
<td>89.16</td>
<td>91.11</td>
</tr>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>353.76</td>
<td>368.20</td>
</tr>
<tr>
<td>Combined Hazardous Air Pollutants (HAPs)</td>
<td>0.34</td>
<td>0.38</td>
</tr>
<tr>
<td>Individual HAP: Formaldehyde</td>
<td>*see footnote</td>
<td>*see footnote</td>
</tr>
</tbody>
</table>

*The installation reports HAPs as VOC or PM10 as allowed by 10 CSR 10-6.110.

Permit Reference Documents
These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

1) Part 70 Operating Permit Application, received December 6, 2017;
2) 2017 Emissions Inventory Questionnaire, received February 23, 2018;
4) webFIRE; and
5) All documents listed in Construction Permit History

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits
In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

See Other Regulatory Determinations

Other Air Regulations Determined Not to Apply to the Operating Permit
The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to the installation at the time for the reasons stated.
Construction Permit History

The following construction permits were issued to the installation:

1) Construction Permit 0198-033
   The Section (5) permit was issued May 12, 1997, to authorize construction of the following equipment:
   - 700-gallon glycol drain/fill tank (EP# T-4),
   - 700-gallon lube oil tank (EP# T-5),
   - Two (2) 9,450-gallon condensate storage tanks (EP#T-7, one tank on site and one tank removed)
   - 3,142-gallon used lube oil storage tank (removed),
   - 3,232-gallon used oil storage tank (removed),
   - 150-gallon unleaded gasoline storage tank (EP# T-17), and
   The construction permit contains three (3) special conditions that apply to the gasoline tank. The first special condition appears in the operating permit. Special Conditions 2 and 3 are duplicative of other requirements in the operating permit and are not included as a streamlining measure.

2) Construction Permit 1098-011
   The Section (8) permit was issued September 29, 1998, to authorize construction of the following equipment:
   - One (1) natural gas fired 5,500 horsepower Clark TCV-16 reciprocating compressor engine (EP# 818), and
   The permit was superseded by Amendment 1098-011A. Therefore, the Special Conditions of the permit do not appear in the operating permit.

3) Construction Permit Amendment 1098-011A
   The amendment was issued on October 5, 2007 to modify the special conditions of construction permit 1098-011. Although not specifically stated, the permit conditions of the amendment supersede all permit conditions of the original permit. The amendment contains six (6) special conditions, all of which appear in the operating permit, except Special Condition 5.B. Special Condition 5.B stated that the installation could only operate engines EP-811 through EP-821. This was needed at the time of the permit because there were eleven (11) other engines on-site that were not included in the modeling analysis (e.g., EP-800 through EP-810). These engines, EP-800 through EP-810, have been removed from the installation; therefore, the installation is inherently compliant with this requirement (i.e., the installation doesn’t have any other engines to operate). The amendment requires the installation to institute a Parametric Emissions Monitoring System (PEMS) that incorporates a trapped air/fuel equivalence methodology into the actual control of the engines. The permit amendment requires annual testing. The installation conducted testing in 2017 and the results are presented in the table below:
<table>
<thead>
<tr>
<th>Emission Point #</th>
<th>Test Date</th>
<th>NOx Results (g/BHP-Hr)</th>
<th>CO Results (g/BHP-Hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP# 818</td>
<td>May 10, 2017</td>
<td>1.862</td>
<td>1.200</td>
</tr>
<tr>
<td>EP# 819</td>
<td>April 12, 2017</td>
<td>1.254</td>
<td>1.883</td>
</tr>
<tr>
<td>EP# 820</td>
<td>April 18, 2017</td>
<td>1.534</td>
<td>1.823</td>
</tr>
<tr>
<td>EP# 821</td>
<td>August 16, 2017</td>
<td>1.443</td>
<td>1.795</td>
</tr>
</tbody>
</table>

4) No Permit Required Determination, PAMS Number: 2011-05-053
The determination was issued June 20, 2011, for the installation of two (2) Caterpillar Model G3412CLE 637 Horsepower natural gas fired emergency generators. Potential emissions were calculated based on 500 hours per year per engine and were less than the permitting thresholds; therefore, no construction permit is required. These units appear in the operating permit.

5) Equipment Removed Since Previous Operating Permit
Since issuance of the previous operating permit, the installation has removed the following equipment:

<table>
<thead>
<tr>
<th>EP#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-12</td>
<td>Storage tank, 2,066 gallon capacity, contained pipeline liquids</td>
</tr>
<tr>
<td>T-23</td>
<td>Storage tank, 500 gallon capacity, contained pipeline liquids</td>
</tr>
</tbody>
</table>

Since issuance of the previous operating permit, the permittee informed the Air Pollution Control Program on April 18, 2018, that the following three (3) pieces of equipment have been permanently removed from the installation:

<table>
<thead>
<tr>
<th>EP#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-13</td>
<td>Storage tank, 600 gallon capacity, Glycol/water</td>
</tr>
<tr>
<td>T-14</td>
<td>Storage tank, 500 gallon capacity, Air compressor liquids</td>
</tr>
<tr>
<td>827</td>
<td>Emergency Generator, 544 HP, Natural gas fired unit, 4 stroke lean burn, manufactured 2011, Mfr: Ingersoll Rand, Model : PSVG-8</td>
</tr>
</tbody>
</table>

**New Source Performance Standards (NSPS) Applicability**
40 CFR part 60 Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

These regulations apply to storage vessels with the following parameters:

<table>
<thead>
<tr>
<th>Rule</th>
<th>Constructed/modified/reconstructed</th>
<th>With contents and capacities</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>Between June 11, 1973 and May 19, 1978</td>
<td>Petroleum liquids, &gt;40,000 gallons</td>
</tr>
<tr>
<td>Ka</td>
<td>Between May 18, 1978 and July 23, 1984</td>
<td>Petroleum liquids, &gt;40,000 gallons</td>
</tr>
<tr>
<td>Kb</td>
<td>After July 23, 1984</td>
<td>Volatile organic liquids, &gt;19,813 gallons</td>
</tr>
</tbody>
</table>

All storage tanks at the installation have capacities less than 19,813 gallons, except EP-20, with a capacity of 200,000 gallons. According to the provisions of §60.110b(b), the regulation does not apply to storage tanks with capacities greater than 151 m³ (39,890 gallons) containing a liquid with a maximum true vapor pressure less than 3.5 kPa. The wastewater tank has a maximum true vapor pressure less than the value, therefore the regulation does not apply.

40 CFR Part 60 Subpart XX, Standards of Performance for Bulk Gasoline Terminals
The regulation applies to loading racks at a bulk gasoline terminal which deliver liquid product into gasoline tank trucks. Bulk gasoline terminal is defined as any gasoline facility which receives gasoline by pipeline, ship or barge, and has a gasoline throughput greater than 75,700 liters per day (19,997.8 gallons per day). The installation does not meet the definition, therefore the regulation does not apply.

40 CFR Part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
The subpart applies to compression ignition internal combustion engines. All engines at the installation are spark ignition, therefore the regulation does not apply.

40 CFR Part 60 Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
The large internal combustion engines (EP-811 through EP-821) were all constructed prior to the applicability date of July 2006, and therefore do not meet the applicability of the regulation.

The emergency generators (EP-828 and 829) were all constructed in 2011. The provisions for certified emergency engines have been applied in the permit.

**Maximum Achievable Control Technology (MACT) Applicability**
The regulation applies to bulk gasoline terminals, pipeline breakout stations as defined in the rule. Bulk gasoline terminals are defined as any gasoline facility which receives gasoline by pipeline, ship or barge, and has a gasoline throughput greater than 75,700 liters per day (19,997.8 gallons per day). Pipeline breakout station is defined as facility along a pipeline containing storage vessels used to relieve surges or receive and store gasoline from the pipeline for reinjection and continued transportation by pipeline or to other facilities.
The installation does not meet these definitions; therefore the regulation does not apply.

40 CFR part 63 Subpart T, National Emission Standards for Halogenated Solvent Cleaning
The provisions of the subpart apply to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5) or chloroform (CAS No. 67-66-3), or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent. The concentration of these solvents may be determined using EPA test method 18, material safety data sheets, or engineering calculations. Wipe cleaning activities, such as using a rag containing halogenated solvent or a spray cleaner containing halogenated solvent are not covered under the provisions of the subpart.

The parts washer (EP PW) uses a solvent that does not contain any of the target HAPs. Therefore the regulation does not apply.

40 CFR part 63 Subpart CC, National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
The regulation applies to petroleum refining process units and to related emissions points as specified in the rule. Petroleum refining process units are defined as any process unit used in an establishment primarily engaged in petroleum refining as defined in SIC 2911, and used primarily for operations specified in the rule. The installation conduct operations classified under SIC 4922, therefore the regulation does not apply.

The regulation applies to organic liquid distribution operations at major sources of HAPs. The regulation does not apply to gasoline operations. The truck loading rack (EP TLOAD) is used to load gasoline from tank (EP T-17) into trucks. Therefore the regulation does not apply.

The emergency generators (EP-828 and 829) were all constructed in 2011. According to §63.6590(b)(i), new emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) do not have to meet the requirements of the subpart and of subpart A of the part except for the initial notification requirements of §63.6645(f).

Sections §63.6640(f)(2)(ii) and (iii) were vacated by the US EPA on April 15, 2016. Therefore, the installation cannot operate for these purposes and meets the applicability of §63.6590(b)(i), and the regulation does not appear as a permit condition in the operating permit. The language of these sections is included here for reference purposes only.

Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation
(NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. [§63.6640(f)(2)(ii)]

Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [§63.6640(f)(2)(iii)]

The large internal combustion engines (EP-811 through EP-821) meet the criteria of §63.6590(b)(3)(i) as existing (installed prior to December 2002) spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions; therefore, the installation does not have to meet the requirements of 40 CFR 63 Subpart ZZZZ:

<table>
<thead>
<tr>
<th>EIQ Reference</th>
<th>Description (Installation Date)</th>
<th>Make/Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP - 811</td>
<td>1,600 hp I/C engine, natural gas fueled, 2-cycle lean burn (1947)</td>
<td>Clark/BA-8</td>
</tr>
<tr>
<td>EP - 812</td>
<td>1,600 hp I/C engine, natural gas fueled, 2-cycle lean burn (1950)</td>
<td>Clark/BA-8</td>
</tr>
<tr>
<td>EP - 813</td>
<td>1,760 hp I/C engine, natural gas fueled, 2-cycle lean burn (1951)</td>
<td>Clark/HBA-8</td>
</tr>
</tbody>
</table>

40 CFR part 63 Subpart DDDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters
The provisions of the subpart apply to various industrial, commercial, or institutional boiler or process heaters located at major sources of HAPs. The regulation applies to the installation as detailed in the table below for the process heaters.
Category | Gas 1 subcategory, existing units < 5 MMBtu/hr | Initial Compliance | Satisfied, not included in permit condition.
--- | --- | --- | ---
Compliance date | January 31, 2016 | Continuous Compliance | §63.7540(a)(12)
Emission Limitations: | None per §63.7500(e) | Notification Requirements | §63.7550
Work Practice Standards | Table 3, Items #1, §63.7540(a)(12) and (13) | Recordkeeping Requirements | §63.7555, §63.7560
Performance Tests | None per §63.7500(a) | Reporting Requirements | §63.7550 and Table 3 to Subpart DDDDD
Tune Up Requirements | Every five years, §63.7500(e), §63.7540(a)(12) | General Provisions | Table 10 to Subpart DDDDD

40 CFR part 63 Subpart BBBBBB, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities
The regulation applies to bulk gasoline terminal, pipeline breakout station, pipeline pumping station, and bulk gasoline plant as identified in the rule located at area sources of HAPs. The installation is a major source of HAPs, therefore the regulation does not apply.

The regulation applies to gasoline dispensing facilities located at area sources of HAPs. The installation is a major source of HAPs, therefore the regulation does not apply.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability
40 CFR part 61 Subpart M, National Emission Standard for Asbestos
The regulation applies to all installations in Missouri and appears in the permit.

Compliance Assurance Monitoring (CAM) Applicability
40 CFR Part 64, Compliance Assurance Monitoring (CAM)
The CAM rule applies to each pollutant specific emission unit that:
- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.
40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a control device to achieve compliance with a relevant standard.

Greenhouse Gas Emissions
Note that the source may be subject to the Greenhouse Gas Reporting Rule. However, the preamble of the GHG Reporting Rule clarifies that Part 98 requirements do not have to be incorporated in Part 70 permits operating permits at the time. In addition, Missouri regulations do not require the installation to report CO₂ emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation's CO₂ emissions were not included within the permit. If required to report, the permittee is required to
report the data directly to EPA. The public may obtain CO₂ emissions data by visiting [http://epa.gov/ghgreporting/ghgdata/reportingdatasets.html](http://epa.gov/ghgreporting/ghgdata/reportingdatasets.html).

**Other Regulatory Determinations**

10 CSR 10-6.170, Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin
While this rule applies, it is unlikely that particulate matter will emit beyond the installation's property line in any significant quantities due to the nature of its emission points. As a result, no monitoring or recordkeeping is required.

10 CSR 10-6.220, Restriction of Emission of Visible Air Contaminants
The regulation applies to all sources of visible emissions, with various exemptions. All combustion units are natural gas fired units, and meet exemption (1)(L). Therefore the regulation does not apply to the installation.

10 CSR 10-6.260, Restriction of Emission of Sulfur Compounds
The regulation was rescinded from the code of state regulations (CSR). However, the regulation is still contained in Missouri’s State Implementation Plan (SIP). The regulation is a federally enforceable requirement until it is removed from the SIP, therefore it must appear in the Operating Permit. All combustion units are natural gas fired, and meet exemption (1)(A)2. Therefore the regulation does not apply to the installation.

10 CSR 10-6.261, Control of Sulfur Dioxide Emissions
The regulation applies to all sources of sulfur dioxide. All combustion units are natural gas fired, and meet exemption (1)(A). Therefore the regulation does not apply to the installation.

10 CSR 10-6.390, Control of NOx Emissions from Large Stationary Internal Combustion Engines
The regulation applies to stationary internal combustion engines located in specific counties of a specific size, with various exemptions. The installation is not located in any of the specific counties, therefore the regulation does not apply.

10 CSR 10-6.045, Restriction of Particulate Matter Emissions from Fuel Burning Equipment Used for Indirect Heating
All indirect heating units at the installation combust natural gas, therefore the installation meets exemption (1)(E) and the regulation does not apply.

EPA Memorandum by Ms. Lydia N. Wegman, Deputy Director, Office of Air Quality Planning and Standards (MD-10), “White Paper for Streamlined Development of Part 70 Permit Applications” dated July 10, 1995: Definition of Trivial Activities, namely Plant Maintenance and Upkeep
The bead blaster (Emission Point BB) was discussed in the previous permit and applications. Because of the U.S. EPA memo by Ms. Wegman, the bead blaster is considered a trivial activity as defined in the memo and would not be subject to Part 70 permitting as plant maintenance and upkeep activities not related to the source’s primary business activity.
Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis
Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on the review, to be an applicable requirement for the installation for one or more of the following reasons:

1) The specific pollutant regulated by that rule is not emitted by the installation;
2) The installation is not in the source category regulated by that rule;
3) The installation is not in the county or specific area that is regulated under the authority of that rule;
4) The installation does not contain the type of emission unit which is regulated by that rule;
5) The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the APCP's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

Response to Public Comments
The draft Part 70 Operating Permit for Panhandle Eastern Pipe Line was placed on public notice April 20, 2018, for a 30-day comment period. The public notice was published on the Department of Natural Resources’ Air Pollution Control Program’s web page at: https://dnr.mo.gov/env/apcp/permit-public-notices.htm. During the Public Notice period, no public comments were received.
Dear Mr. Kerns:

Enclosed with this letter is your Part 70 operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at http://dnr.mo.gov/regions/. The online CAV request can be found at http://dnr.mo.gov/cav/compliance.htm.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.078.16 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you have any questions or need additional information regarding this permit, please contact the Air Pollution Control Program (APCP) at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.
Operating Permit Unit Chief

MJS:mbj

Enclosures

Recycled paper