



August 12, 2016

**BY: U.S. CERTIFIED MAIL, RETURN RECEIPT REQUESTED**

9590 9401 0103 5168 7643 32

William F. Durham  
Director, Division of Air Quality  
WVDEP  
601 57<sup>th</sup> Street  
Charleston, WV 25304

**RE: Dominion Transmission, Inc. – Title V Renewal Application**  
**Sweeney Compressor Station – R30-04100012-2012**

Dear Mr. Durham:

Enclosed please find the Title V Renewal Application for Dominion Transmission, Inc.'s (DTI) Sweeney Compressor Station, Permit No. R30-04100012-2012. The enclosure consists of one hard copy and two cd copies of the application that includes all attachments.

As part of the Title V renewal application, the equipment list has been updated based on recent updates to the Sweeney Station:

- Equipment removed from the facility:
  - CPR01 – Waukesha XAHU-5746X Emergency Air Compressor (50 hp)
  - HTR01 – Parkersburg IH3000 Pipeline Heater (3.0 MMBtu/hr)
  - BLR01 – Weil-McLain Boiler (3.74 MMBtu/hr)
  - TK04 – 65 gal Horizontal Aboveground Storage Tank (Methanol)
  - TK08 – 4,200 gal Vertical Aboveground Storage Tank (Triethylene Glycol)
  - TK09 – 4,200 gal Vertical Aboveground Storage Tank (Ethylene Glycol)
- Equipment added to the facility:
  - BLR02 – Cleaver Brooks Boiler (3.5 MMBtu/hr)
  - TK10 – 2,000 gal Horizontal Aboveground Storage Tank (Produced Fluids)
  - TK11 – 1,000 gal Horizontal Aboveground Storage Tank (Produced Fluids)
  - TK12 – 455 gal Horizontal Aboveground 7-Chambered Storage Tank (Lube Oil)
  - TK13 – 1,000 gal Horizontal Aboveground Storage Tank (Triethylene Glycol)
  - TK14 – 4,000 gal Horizontal Aboveground Storage Tank (Distillate Oil)

- Correction to equipment at the facility:
  - TK07 – This tank was previously listed as a produced fluids tank, but the correct description is a distillate oil tank.
  - FL02 – The flare previously had a design capacity of “99% efficiency”. We request to change this to “4.0 MMBtu/hr”.

In addition, as part of the renewal application, we request the following change to the Title V permit:

- Section 6.0 – Auxiliary Generators (AUX03 and AUX04)

We request that NESHAP Subpart ZZZZ non-emergency “remote” requirements be spelled out and included in the Title V permit for auxiliary generators AUX03 and AUX04 as they are remote engines under the NESHAP. As a result, the other NESHAP requirements for these engines would be removed.

- Sections 6.0 and 7.0 – NESHAP Subpart ZZZZ Requirements

We request that the NESHAP Subpart ZZZZ requirements be spelled out and included in the Title V permit (instead of just referenced in the Title V permit) to improve clarity and ensure compliance. Therefore, all requirements for the facility will be in one permit (Title V).

If you require any additional information, please contact Rebekah Remick at (804) 273-3536 or via email at [Rebekah.J.Remick@dom.com](mailto:Rebekah.J.Remick@dom.com).

Sincerely,



Amanda B. Tornabene  
Director, Energy Infrastructure Environmental Services

**SWEENEY COMPRESSOR STATION  
DOMINION TRANSMISSION, INC.  
APPLICATION FOR TITLE V OPERATING PERMIT RENEWAL  
TITLE V OPERATING PERMIT NO: R30-04100012-2012**

**Dominion Transmission, Inc.**  
Sweeney Compressor Station  
1835 Fink Creek Road  
Camden, WV 26338

**AUGUST 2016**

**DOMINION TRANSMISSION, INC.  
SWEENEY COMPRESSOR STATION**

**TITLE V OPERATING PERMIT RENEWAL APPLICATION**

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**ATTACHMENTS**

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Attachment C: Process Flow Diagrams

Attachment D: Title V Equipment Table

Attachment E: Emission Unit Forms

Attachment G: Air Pollution Control Device Form

**\*\*Note:** There are no Attachments F and H for this permit application.

## TITLE V PERMIT APPLICATION CHECKLIST FOR ADMINISTRATIVE COMPLETENESS

Requirement	Application
One signed copy of the application (per WVDEP email correspondence 4/16/15)	Enclosed – Section 2
Correct number of copies of the application on separate CDs or diskettes, (i.e. at least one disc per copy)	Enclosed – 2 CDs
*Table of Contents (needs to be included but not for administrative completeness)	Table of Contents
Facility Information	Section 1/Section 2
Description of process and products, including NAICS and SIC codes, and including alternative operating scenarios	Section 1 / Section 2: TV Renewal Application Form Section #14
Area map showing plant location	Attachment A
Plot plan showing buildings and process areas	Attachment B
Process flow diagram(s), showing all emission units, control equipment, emission points, and their relationships	Attachment C
Identification of all applicable requirements with a description of the compliance status, the methods used for demonstrating compliance, and a Schedule of Compliance Form (ATTACHMENT F) for all requirements for which the source is not in compliance	Not Applicable
Listing of all active permits and consent orders (if applicable)	Section 2: TV Renewal Application Form Section #21

Facility-wide emissions summary	Section 2: TV Renewal Application Form Section #23
Identification of Insignificant Activities	Section 2: TV Renewal Application Form Section #24
ATTACHMENT D – Title V Equipment Table completed for all emission units at the facility except those designated as insignificant activities	Attachment D
ATTACHMENT E – Emission Unit Form completed for each emission unit listed in the Title V Equipment Table (ATTACHMENT D) and a Schedule of Compliance Form (ATTACHMENT F) for all requirements for which the emission unit is not in compliance	Attachment E Attachment F not applicable
ATTACHMENT G – Air Pollution Control Device Form completed for each control device listed in the Title V Equipment Table (ATTACHMENT D)	Attachment G
ATTACHMENT H – Compliance Assurance Monitoring (CAM) Plan Form completed for each new control device for which the “Is the device subject to CAM?” question is answered “Yes” on the Air Pollution Control Device Form (ATTACHMENT G)	Attachment H not applicable
General Application Forms signed by a Responsible Official	Enclosed – Section 2
Confidential Information submitted in accordance with 45CSR31	Not Applicable

# **SECTION 1**

## Introduction

## **INTRODUCTION:**

Sweeney Station is a natural gas storage and compressor station used to pump natural gas into and out of a storage pool for Dominion Transmission, Inc. in West Virginia. Included in the Sweeney Station Title V permit is Dry Fork II M&R, a natural gas dehydration, measuring, and pressure regulating facility. Both are located in Camden, Lewis County, WV.

Sweeney Station has the potential to emit in excess of 100 tons per year of nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and volatile organic compounds (VOC). The station is classified as a major stationary source under West Virginia Department of Environmental Protection (WVDEP) Regulation (45 CSR Part 30) and is subject to the Title V Operating Permit provisions of Part 30. Sweeney Station is an area source of hazardous air pollutants (HAPs) since the potential to emit is less than 10 tons per year for individual HAPs and less than 25 tons per year of combined HAPs.

The last Title V Operating Permit renewal application was submitted in July 2011, and the renewed Title V Operating Permit was issued on June 12, 2012, with an expiration date of June 12, 2017. Sweeney Station is also subject to the underlying State Operating Permit (Rule 13 Permit No: R13-2498B). The Title V operating permit is for the operation of four (4) 1,350 hp natural gas fired reciprocating engines (EN01 – EN04), one (1) glycol dehydrator system (DEHY02) with a flare (FL02), one (1) dehydration unit reboiler (RBR02), two (2) 813 hp non-emergency auxiliary generators (AUX03 and AUX04), one (1) boiler (BLR02), and eleven (11) above ground storage tanks of various sizes (TK01 – TK03, TK05 – TK07, and TK10 – TK14).

## **PROCESS DESCRIPTION**

Sweeney Station is a storage and compressor facility that services a natural gas storage pool and pipeline system. The compressor engines (EN01 – EN04) at the facility receive natural gas, flowing through a valve on the pipeline and at alternate times during the year, injects or withdraws natural gas from an underground storage pool. Prior to exiting the facility through the pipeline, the compressed natural gas is processed by the dehydration unit (DEHY02). The dehydration unit removes moisture and impurities from the gas stream.

The dehydration process (which is located at Dry Fork II M&R) begins with the compressed natural gas entering the unit and then being passed through a triethylene glycol dehydration system consisting of a contactor bed, a reboiler (RBR02), and associated equipment. As a result of this process, the natural gas is stripped of moisture and impurities, along with a small amount of hydrocarbons. The wet gas enters the contactor where moisture and some hydrocarbons are absorbed into the lean glycol. The glycol, which has become rich with absorbed moisture and some hydrocarbons, is regenerated in the still column (DEHY02) using the heat generated from the natural gas-fired reboiler (RBR02) to liberate the moisture and hydrocarbon vapors. The regenerator vapors are vented to the flare (FL02) to combust the hydrocarbons; thereby, reducing overall emissions and odor. The compressed, dehydrated gas then enters the pipeline.



Listed below is a description of the equipment located at the Sweeney Station:

Four (4) 1,350 hp Cooper GMVA-10 natural gas-fired reciprocating engines/integral compressors

- Emission unit ID: EN01 – EN04
- Emission point ID: EN01 – EN04

Two (2) 813 hp Caterpillar G3512 non-emergency auxiliary generators

- Emission unit ID: AUX03 and AUX04
- Emission point ID: AUX03 and AUX04

One (1) 3.5 MMBtu/hr natural gas-fired boiler

- Emission unit ID: BLR02
- Emission point ID: BLR02

One (1) 1.47 MMBtu/hr natural gas-fired dehydration unit reboiler

- Emission unit ID: RBR02
- Emission point ID: RBR02

One (1) 320 MMscf wet gas/day glycol dehydration system

- Emission unit ID: DEHY02
- Emission point ID: DEHY02

One (1) still flare

- Emission unit ID: FL02
- Emission point ID: 2E

One (1) 10,000 gallon vertical aboveground lube oil storage tank

- Emission unit ID: TK01
- Emission point ID: TK01

One (1) 10,000 gallon vertical aboveground lube oil storage tank

- Emission unit ID: TK02
- Emission point ID: TK02

One (1) 5,000 gallon horizontal aboveground ethylene glycol storage tank

- Emission unit ID: TK03
- Emission point ID: TK03

One (1) 2,520 gallon vertical aboveground used oil storage tank

- Emission unit ID: TK05
- Emission point ID: TK05

One (1) 300 gallon horizontal aboveground used oil storage tank

- Emission unit ID: TK06
- Emission point ID: TK06

One (1) 2,520 gallon vertical aboveground distillate oil storage tank

- Emission unit ID: TK07
- Emission point ID: TK07

One (1) 2,000 gallon horizontal aboveground produced fluids storage tank

- Emission unit ID: TK10
- Emission point ID: TK10

One (1) 1,000 gallon horizontal aboveground produced fluids storage tank

- Emission unit ID: TK11
- Emission point ID: TK11

One (1) 455 gallon horizontal aboveground lube oil 7-chambered storage tank

- Emission unit ID: TK12
- Emission point ID: TK12

One (1) 1,000 gallon horizontal aboveground triethylene glycol storage tank (located at Dry Fork II M&R)

- Emission unit ID: TK13
- Emission point ID: TK13

One (1) 4,000 gallon horizontal aboveground distillate oil storage tank (located at Dry Fork II M&R)

- Emission unit ID: TK14
- Emission point ID: TK14

## **SECTION 2**

Title V Operating Permit  
Renewal Application –  
General Forms



**WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL  
PROTECTION**

**DIVISION OF AIR QUALITY**

601 57<sup>th</sup> Street SE

Charleston, WV 25304

Phone: (304) 926-0475

[www.dep.wv.gov/daq](http://www.dep.wv.gov/daq)

**INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS**

**Section 1: General Information**

<b>1. Name of Applicant (As registered with the WV Secretary of State's Office):</b> Dominion Transmission, Inc.	<b>2. Facility Name or Location:</b> Sweeney Station
<b>3. DAQ Plant ID No.:</b>  0 4 1 — 0 0 0 1 2	<b>4. Federal Employer ID No. (FEIN):</b>  5 5 0 6 2 9 2 0 3
<b>5. Permit Application Type:</b>  <input type="checkbox"/> Initial Permit <input checked="" type="checkbox"/> Permit Renewal <input type="checkbox"/> Update to Initial/Renewal Permit Application  When did operations commence? 1956 What is the expiration date of the existing permit? 6/12/2017	
<b>6. Type of Business Entity:</b>  <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Governmental Agency <input type="checkbox"/> LLC <input type="checkbox"/> Partnership <input type="checkbox"/> Limited Partnership	<b>7. Is the Applicant the:</b>  <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Both  If the Applicant is not both the owner and operator, please provide the name and address of the other party.  _____  _____  _____
<b>8. Number of onsite employees:</b>  11	
<b>9. Governmental Code:</b>  <input checked="" type="checkbox"/> Privately owned and operated; 0 <input type="checkbox"/> County government owned and operated; 3 <input type="checkbox"/> Federally owned and operated; 1 <input type="checkbox"/> Municipality government owned and operated; 4 <input type="checkbox"/> State government owned and operated; 2 <input type="checkbox"/> District government owned and operated; 5	
<b>10. Business Confidentiality Claims</b>  Does this application include confidential information (per 45CSR31)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  If yes, identify each segment of information on each page that is submitted as confidential, and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's "PRECAUTIONARY NOTICE-CLAIMS OF CONFIDENTIALITY" guidance.	

<b>11. Mailing Address</b>		
<b>Street or P.O. Box:</b> 925 White Oaks Blvd.		
<b>City:</b> Bridgeport	<b>State:</b> WV	<b>Zip:</b> 26330
<b>Telephone Number:</b> (681) 842-3000	<b>Fax Number:</b> (681) 842-3323	

<b>12. Facility Location</b>		
<b>Street:</b> 1835 Fink Creek Road	<b>City:</b> Camden	<b>County:</b> Lewis
<b>UTM Easting:</b> 530.50 km	<b>UTM Northing:</b> 4,328.80 km	<b>Zone:</b> <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
<b>Directions:</b> From I-79 North to the Weston/Buckhannon exit (Exit 99). Take Route 33 to Weston. Go straight through two stoplights and at the third light (at Main Street) turn left. Go one block to 2 <sup>nd</sup> Street, next light, and turn right, following Route 33 West. Travel approximately 6 miles to Camden. Turn right on County Route 9 and go 6.3 miles to County Route 6 (on left) and go 1.7 miles. Station is on the left side of the road, across a small bridge.		
<b>Portable Source?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
<b>Is facility located within a nonattainment area?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, for what air pollutants?</b>
<b>Is facility located within 50 miles of another state?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<b>If yes, name the affected state(s).</b> Ohio Pennsylvania
<b>Is facility located within 100 km of a Class I Area<sup>1</sup>?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <b>If no, do emissions impact a Class I Area<sup>1</sup>?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		<b>If yes, name the area(s).</b> Otter Creek Wilderness Area
<sup>1</sup> Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.		

<b>13. Contact Information</b>		
<b>Responsible Official:</b> Brian C Sheppard		<b>Title:</b> Vice President, Pipeline Operations
<b>Street or P.O. Box:</b> 925 White Oaks Blvd.		
<b>City:</b> Bridgeport	<b>State:</b> WV	<b>Zip:</b> 26330
<b>Telephone Number:</b> (681) 842-3733	<b>Fax Number:</b> (681) 842-3323	
<b>E-mail address:</b> Brian.C.Sheppard@dom.com		
<b>Environmental Contact:</b> Rebekah Remick		<b>Title:</b> Environmental Consultant
<b>Street or P.O. Box:</b> 5000 Dominion Blvd.		
<b>City:</b> Glen Allen	<b>State:</b> VA	<b>Zip:</b> 23060
<b>Telephone Number:</b> (804) 273-3536	<b>Fax Number:</b> (804) 273-2964	
<b>E-mail address:</b> Rebekah.J.Remick@dom.com		
<b>Application Preparer:</b> Rebekah Remick		<b>Title:</b> Environmental Consultant
<b>Company:</b> Dominion Resources, Inc.		
<b>Street or P.O. Box:</b> 5000 Dominion Blvd.		
<b>City:</b> Glen Allen	<b>State:</b> VA	<b>Zip:</b> 23060
<b>Telephone Number:</b> (804) 273-3536	<b>Fax Number:</b> (804) 273-2964	
<b>E-mail address:</b> Rebekah.J.Remick@dom.com		

**14. Facility Description**

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Natural Gas Compressor Station	N/A	486120	4922

**Provide a general description of operations.**

Sweeney Station is a storage and compressor facility that services a natural gas storage pool and pipeline system. The compressor engines (EN01-EN04) at the facility receive natural gas flowing through a valve on the pipeline and, at alternate times during the year, injects or withdraws natural gas from an underground storage pool. Prior to exiting the facility through the pipeline, the compressed natural gas is processed by the dehydration unit (DEHY02). The dehydration unit removes moisture and impurities from the gas stream.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

**Section 2: Applicable Requirements**

<b>18. Applicable Requirements Summary</b>	
Instructions: Mark all applicable requirements.	
<input type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)	<input type="checkbox"/> PSD (45CSR14)
<input checked="" type="checkbox"/> NESHAP (45CSR34)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input checked="" type="checkbox"/> Section 111 NSPS	<input checked="" type="checkbox"/> Section 112(d) MACT standards
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqs.	<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input type="checkbox"/> 45CSR27 State enforceable only rule
<input checked="" type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input type="checkbox"/> Compliance Assurance Monitoring (40CFR64)
<input type="checkbox"/> CAIR NO <sub>x</sub> Annual Trading Program (45CSR39)	<input type="checkbox"/> CAIR NO <sub>x</sub> Ozone Season Trading Program (45CSR40)
<input type="checkbox"/> CAIR SO <sub>2</sub> Trading Program (45CSR41)	
<b>19. Non Applicability Determinations</b>	



**List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.**

45 CSR 10 – Compressor engines (EN01 – EN04) have been excluded from the applicability of SO<sub>2</sub> and H<sub>2</sub>S limits. WVDAQ determined that 45 CSR 10 is not applicable to compressor engines.

40 CFR 60 Subpart JJJJ – The compressor engines (EN01 – EN04) and auxiliary generators (AUX03 and AUX04) are not subject to this subpart since they were manufactured before the applicability date.

40 CFR 60 Subpart OOOO – This subpart does not apply to the facility since the facility does not have gas wells, centrifugal compressors, reciprocating compressors, and/or pneumatic controllers constructed, modified, or reconstructed after August 23, 2011. None of the newly installed tanks onsite meet the applicability requirements in 40 CFR 60.5365(e).

40 CFR 60 Subpart OOOOa – This subpart does not apply to the facility since the facility does not have gas wells, centrifugal compressors, reciprocating compressors, and/or pneumatic controllers constructed, modified, or reconstructed after September 18, 2015. None of the newly installed tanks onsite meet the applicability requirements in 40 CFR 60.5365a(e).

40 CFR 63 Subpart HH – The facility is not considered to be within the natural gas production source category since it does not meet the definition of “facility,” (i.e. the facility is categorized as a natural gas transmission and storage facility). Therefore, the requirements of this subpart do not apply.

40 CFR 63 Subpart HHH – While the facility is a transmission and storage facility, it is not a major source of HAP. Therefore, the requirements of this subpart do not apply.

40 CFR 63 Subpart DDDDD – The reboiler (RBR02) is not subject to this subpart since it is exempt by §63.7491(h) and facility is not major source of HAPs.

40 CFR 63 Subpart JJJJJ – The reboiler (RBR02) is not applicable to this subpart since it is considered a “process heater,” which is excluded from the definition of “boiler” in §63.11237.

40 CFR 64 – The dehy unit (DEHY02) is not subject to CAM since the R13-2498B permit specifies a “continuous compliance determination method” condition (e.g. continuously monitoring the flare using a thermocouple to detect the presence of a flame) which was included in the Title V permit, CAM does not apply (exemption per 64.2(b)(1)(vi)). In addition, the engines do not have any controls; therefore, in accordance with 64.2(a), CAM is not applicable to the engines.

☒ Permit Shield

## 20. Facility-Wide Applicable Requirements

**List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).**

45 CSR 6-3.1 – Open burning prohibited (TV 3.1.1)

45 CSR 6-3.2 – Open burning exemption (TV 3.1.2)

40 CFR Part 61 and 45 CSR 15 – Asbestos inspection and removal (TV 3.1.3)

45 CSR 4-3.1 – No objectionable odors (TV 3.1.4)

45 CSR 11-5.2 – Standby plans for emergency episodes (TV 3.1.5)

WV Code 22-5-4 (a) (14) – Annual emission inventory reporting (TV 3.1.6)

40 CFR Part 82 Subpart F – Ozone depleting substances (TV 3.1.7)

40 CFR Part 68 – Risk Management Plan (TV 3.1.8)

45 CSR 17-3.1 – Fugitive Particulate Matter (TV 3.1.9)

45 CSR 13 – Minor source of HAPs (TV 3.1.10; R13-2498B 4.1.2)

45 CSR 13 – Operation and maintenance of air pollution control equipment (TV 3.1.11; R13-2498B 4.1.21)

45 CSR 13 – Permit suspended or revoked (TV 3.1.12; R13-2498B 4.1.22)

☐ Permit Shield

**For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

45 CSR 6-3.1 – The permittee shall prohibit open burning (TV 3.1.1)

45 CSR 6-3.2 – The permittee shall notify if open burning occurs (TV 3.1.2)

40 CFR Part 61 and 45 CSR 15 – Prior to demolition/construction buildings will be inspected for asbestos (TV 3.1.3)

45 CSR 11 – Upon request by the Secretary, the permittee shall prepare a standby plan (TV 3.1.5)

WV Code 22-5-4 (a) (14) – The permittee shall submit annual emission inventory reporting (TV 3.1.6)

40 CFR Part 82 Subpart F – The permittee will prohibit maintenance, service, or repair of appliances containing ozone depleting substances (TV 3.1.7)

40 CFR Part 68 – Should the permittee become subject to 40 CFR Part 68, a RMP shall be submitted (TV 3.1.8)

45 CSR 17 – The permittee will limit fugitive particulate matter emissions from the facility by burning only pipeline quality natural gas (TV 3.1.9)

45 CSR 13 – The permittee will maintain minor source of HAPs status, and will use GLYCalc to calculate HAP emissions for the dehydration unit (TV 3.1.10 and 3.3.2; R13-2498B 4.1.2 and 4.3.3)

45 CSR 13 and WV Code 22-5-4 (a) (14-15) – Testing Requirements (TV 3.3.1)

45 CSR 30 – Recordkeeping Requirements (TV 3.4)

45 CSR 30-5.1.c.2.A and 13 – The permittee shall keep records of monitoring information (TV 3.4.1; R13-2498B 4.4.1)

45 CSR 4-3.1 – Permittee shall maintain records of all odor complaints received (TV 3.4.3)

45 CSR 13 – Records of maintenance of air pollution control equipment (TV 3.4.4; R13-2498B 4.4.2)

45 CSR 13 – Records of malfunctions of air pollution control equipment (TV 3.4.5; R13-2498B 4.4.3)

45 CSR 13 – Records of potential to emit (PTE) calculations for the entire facility (TV 3.4.6; R13-2498B 4.4.10)

45 CSR 30 – Reporting Requirements (TV 3.5)

45 CSR 30-8 – The permittee shall submit a certified emissions statement and pay fees on an annual basis (TV 3.5.4)

45 CSR 30-5.3.e – The permittee shall submit annual compliance certifications (TV 3.5.5)

45 CSR 30-5.1.c.3.A – The permittee shall submit semi-annual monitoring reports (TV 3.5.6)

**Are you in compliance with all facility-wide applicable requirements?** ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

<b>21. Active Permits/Consent Orders</b>		
Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit ( <i>if any</i> )
R13-2498B	7/25/2011	N/A

<b>22. Inactive Permits/Obsolete Permit Conditions</b>		
Permit Number	Date of Issuance	Permit Condition Number
N/A		

**Section 3: Facility-Wide Emissions**

<b>23. Facility-Wide Emissions Summary [Tons per Year]</b>	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	184.09
Nitrogen Oxides (NO <sub>x</sub> )	1,092.01
Lead (Pb)	N/A
Particulate Matter (PM <sub>2.5</sub> ) <sup>1</sup>	7.78
Particulate Matter (PM <sub>10</sub> ) <sup>1</sup>	7.78
Total Particulate Matter (TSP)	10.48
Sulfur Dioxide (SO <sub>2</sub> )	0.17
Volatile Organic Compounds (VOC)	180.58
Hazardous Air Pollutants <sup>2</sup>	Potential Emissions
Acetaldehyde	1.63
Acrolein	1.62
Benzene	0.59
Ethylbenzene	1.84
Formaldehyde	5.95
Hexane	0.12
Toluene	0.44
Xylene	1.13
Regulated Pollutants other than Criteria and HAP	Potential Emissions
<sup>1</sup> PM <sub>2.5</sub> and PM <sub>10</sub> are components of TSP. <sup>2</sup> For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.	

**Section 4: Insignificant Activities**

<b>24. Insignificant Activities (Check all that apply)</b>	
<input checked="" type="checkbox"/>	1. Air compressors and pneumatically operated equipment, including hand tools.
<input type="checkbox"/>	2. Air contaminant detectors or recorders, combustion controllers or shutoffs.
<input checked="" type="checkbox"/>	3. Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
<input checked="" type="checkbox"/>	4. Bathroom/toilet vent emissions.
<input type="checkbox"/>	5. Batteries and battery charging stations, except at battery manufacturing plants.
<input type="checkbox"/>	6. Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
<input type="checkbox"/>	7. Blacksmith forges.
<input checked="" type="checkbox"/>	8. Boiler water treatment operations, not including cooling towers.
<input type="checkbox"/>	9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
<input type="checkbox"/>	10. CO <sub>2</sub> lasers, used only on metals and other materials which do not emit HAP in the process.
<input type="checkbox"/>	11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
<input checked="" type="checkbox"/>	12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
<input checked="" type="checkbox"/>	13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
<input type="checkbox"/>	14. Demineralized water tanks and demineralizer vents.
<input type="checkbox"/>	15. Drop hammers or hydraulic presses for forging or metalworking.
<input type="checkbox"/>	16. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
<input type="checkbox"/>	17. Emergency (backup) electrical generators at residential locations.
<input type="checkbox"/>	18. Emergency road flares.
<input type="checkbox"/>	<p>19. Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO<sub>x</sub>, SO<sub>2</sub>, VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units.</p> <p>Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

24. Insignificant Activities (Check all that apply)	
<input type="checkbox"/>	<p>20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27.</p> <p>Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input checked="" type="checkbox"/>	22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
<input type="checkbox"/>	23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
<input type="checkbox"/>	24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
<input type="checkbox"/>	25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
<input type="checkbox"/>	26. Fire suppression systems.
<input checked="" type="checkbox"/>	27. Firefighting equipment and the equipment used to train firefighters.
<input type="checkbox"/>	28. Flares used solely to indicate danger to the public.
<input checked="" type="checkbox"/>	29. Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
<input type="checkbox"/>	30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
<input checked="" type="checkbox"/>	31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
<input type="checkbox"/>	32. Humidity chambers.
<input type="checkbox"/>	33. Hydraulic and hydrostatic testing equipment.
<input type="checkbox"/>	34. Indoor or outdoor kerosene heaters.
<input checked="" type="checkbox"/>	35. Internal combustion engines used for landscaping purposes.
<input type="checkbox"/>	36. Laser trimmers using dust collection to prevent fugitive emissions.
<input type="checkbox"/>	37. Laundry activities, except for dry-cleaning and steam boilers.
<input type="checkbox"/>	38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
<input type="checkbox"/>	39. Oxygen scavenging (de-aeration) of water.
<input type="checkbox"/>	40. Ozone generators.

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/>	41. Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.)
<input type="checkbox"/>	42. Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
<input type="checkbox"/>	43. Process water filtration systems and demineralizers.
<input checked="" type="checkbox"/>	44. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
<input type="checkbox"/>	45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
<input type="checkbox"/>	46. Routing calibration and maintenance of laboratory equipment or other analytical instruments.
<input type="checkbox"/>	47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
<input type="checkbox"/>	48. Shock chambers.
<input type="checkbox"/>	49. Solar simulators.
<input checked="" type="checkbox"/>	50. Space heaters operating by direct heat transfer.
<input type="checkbox"/>	51. Steam cleaning operations.
<input type="checkbox"/>	52. Steam leaks.
<input type="checkbox"/>	53. Steam sterilizers.
<input type="checkbox"/>	54. Steam vents and safety relief valves.
<input type="checkbox"/>	55. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
<input type="checkbox"/>	56. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
<input type="checkbox"/>	57. Such other sources or activities as the Director may determine.
<input type="checkbox"/>	58. Tobacco smoking rooms and areas.
<input type="checkbox"/>	59. Vents from continuous emissions monitors and other analyzers.

*Section 5: Emission Units, Control Devices, and Emission Points*

<b>25. Equipment Table</b>
Fill out the <b>Title V Equipment Table</b> and provide it as <b>ATTACHMENT D</b> .
<b>26. Emission Units</b>
For each emission unit listed in the <b>Title V Equipment Table</b> , fill out and provide an <b>Emission Unit Form</b> as <b>ATTACHMENT E</b> .
For each emission unit not in compliance with an applicable requirement, fill out a <b>Schedule of Compliance Form</b> as <b>ATTACHMENT F</b> .
<b>27. Control Devices</b>
For each control device listed in the <b>Title V Equipment Table</b> , fill out and provide an <b>Air Pollution Control Device Form</b> as <b>ATTACHMENT G</b> .
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the <b>Compliance Assurance Monitoring (CAM) Form(s)</b> for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as <b>ATTACHMENT H</b> .



**Section 6: Certification of Information**

**28. Certification of Truth, Accuracy and Completeness and Certification of Compliance**

*Note: This Certification must be signed by a responsible official. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.*

**a. Certification of Truth, Accuracy and Completeness**

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

**b. Compliance Certification**

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

**Responsible official (type or print)**

Name: Brian C. Sheppard

Title: Vice President, Pipeline Operations

**Responsible official's signature:**

Signature:   
(Must be signed and dated in blue ink)

Signature Date: 08-09-16

**Note: Please check all applicable attachments included with this permit application:**

☒ ATTACHMENT A: Area Map

☒ ATTACHMENT B: Plot Plan(s)

☒ ATTACHMENT C: Process Flow Diagram(s)

☒ ATTACHMENT D: Equipment Table

☒ ATTACHMENT E: Emission Unit Form(s)

☐ ATTACHMENT F: Schedule of Compliance Form(s)

☒ ATTACHMENT G: Air Pollution Control Device Form(s)

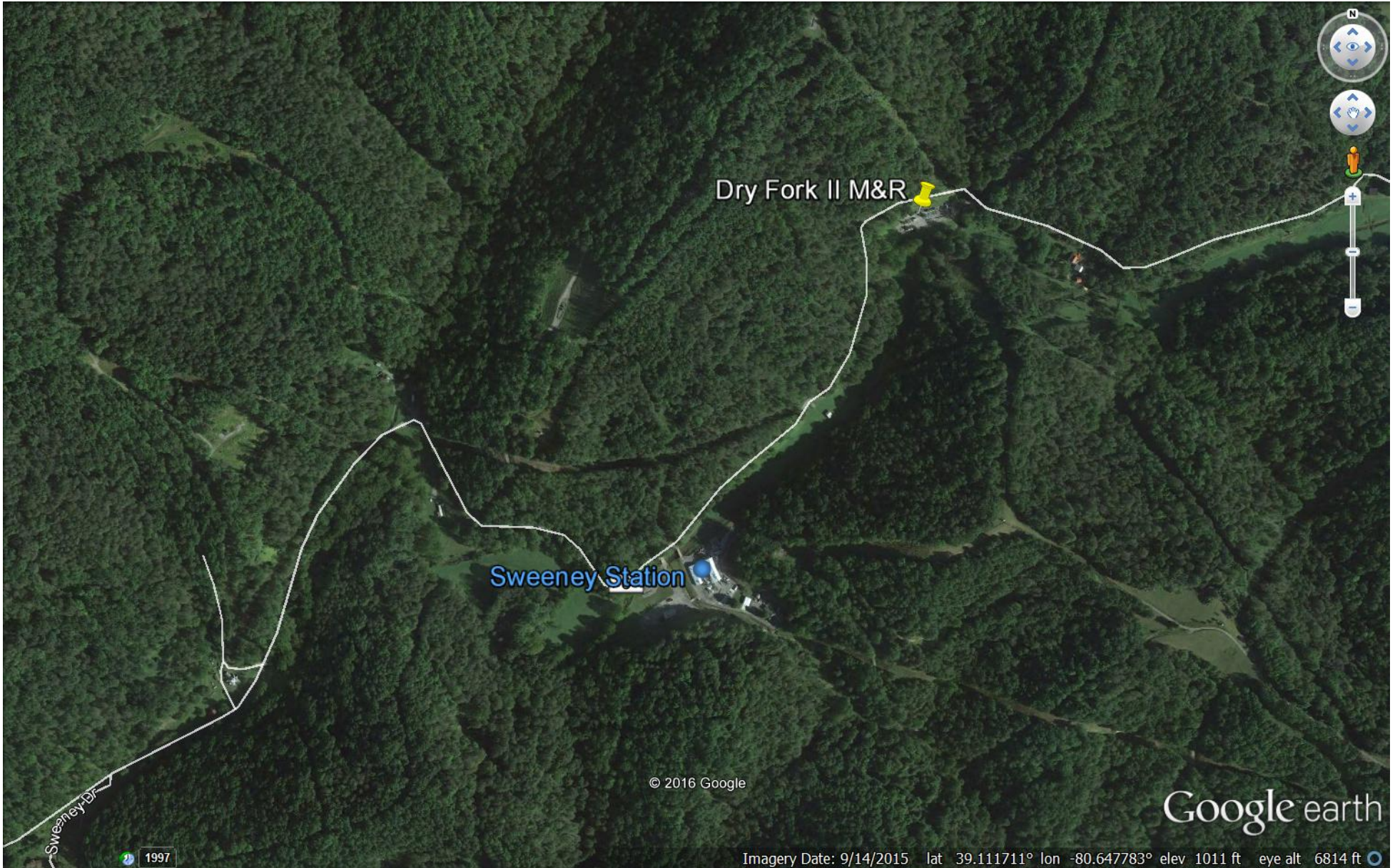
☐ ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

***All of the required forms and additional information can be found and downloaded from, the DEP website at [www.dep.wv.gov/dag](http://www.dep.wv.gov/dag), requested by phone (304) 926-0475, and/or obtained through the mail.***

## **Attachment A**

Area Map

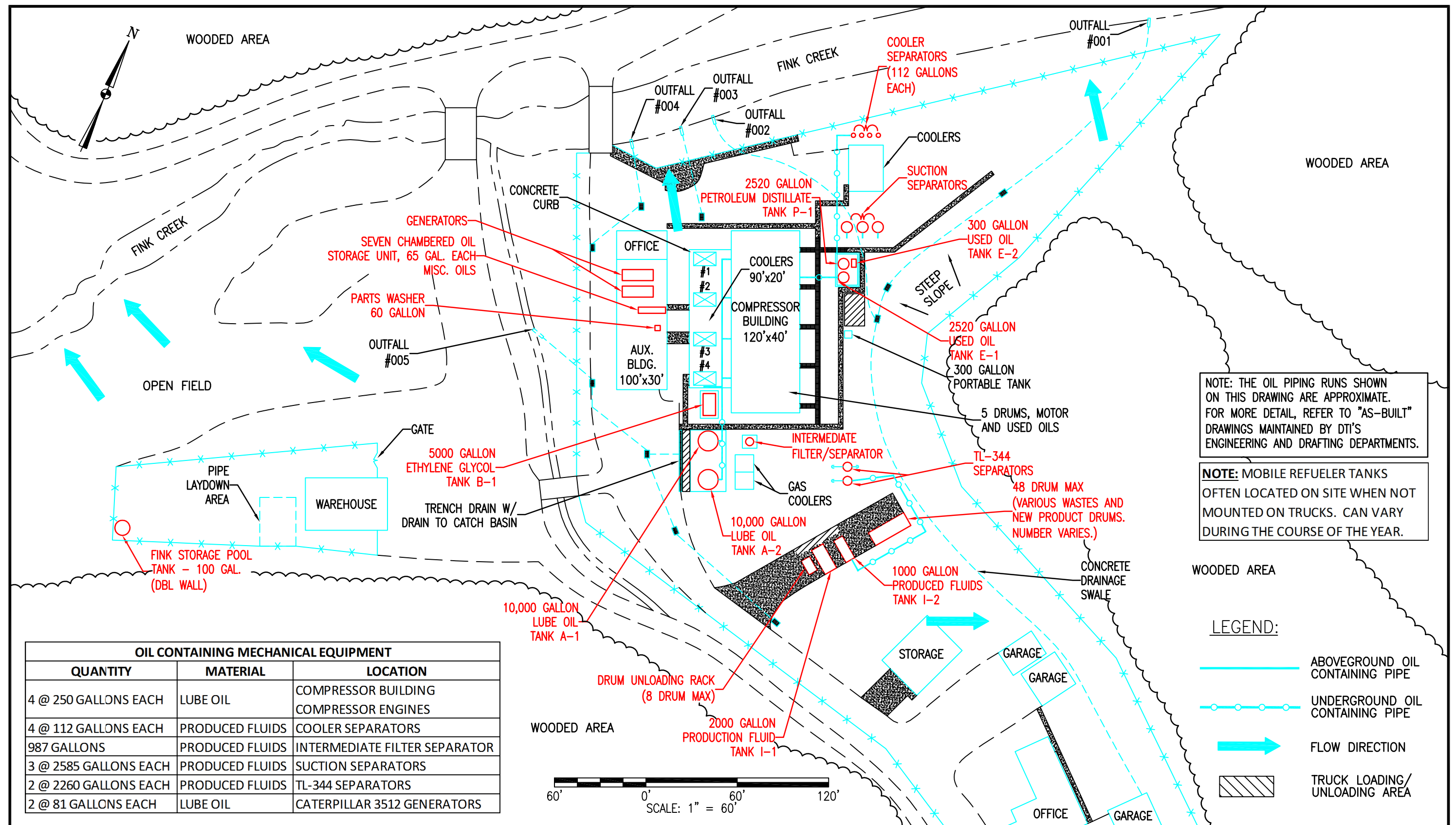




## **Attachment B**

Plot Plan



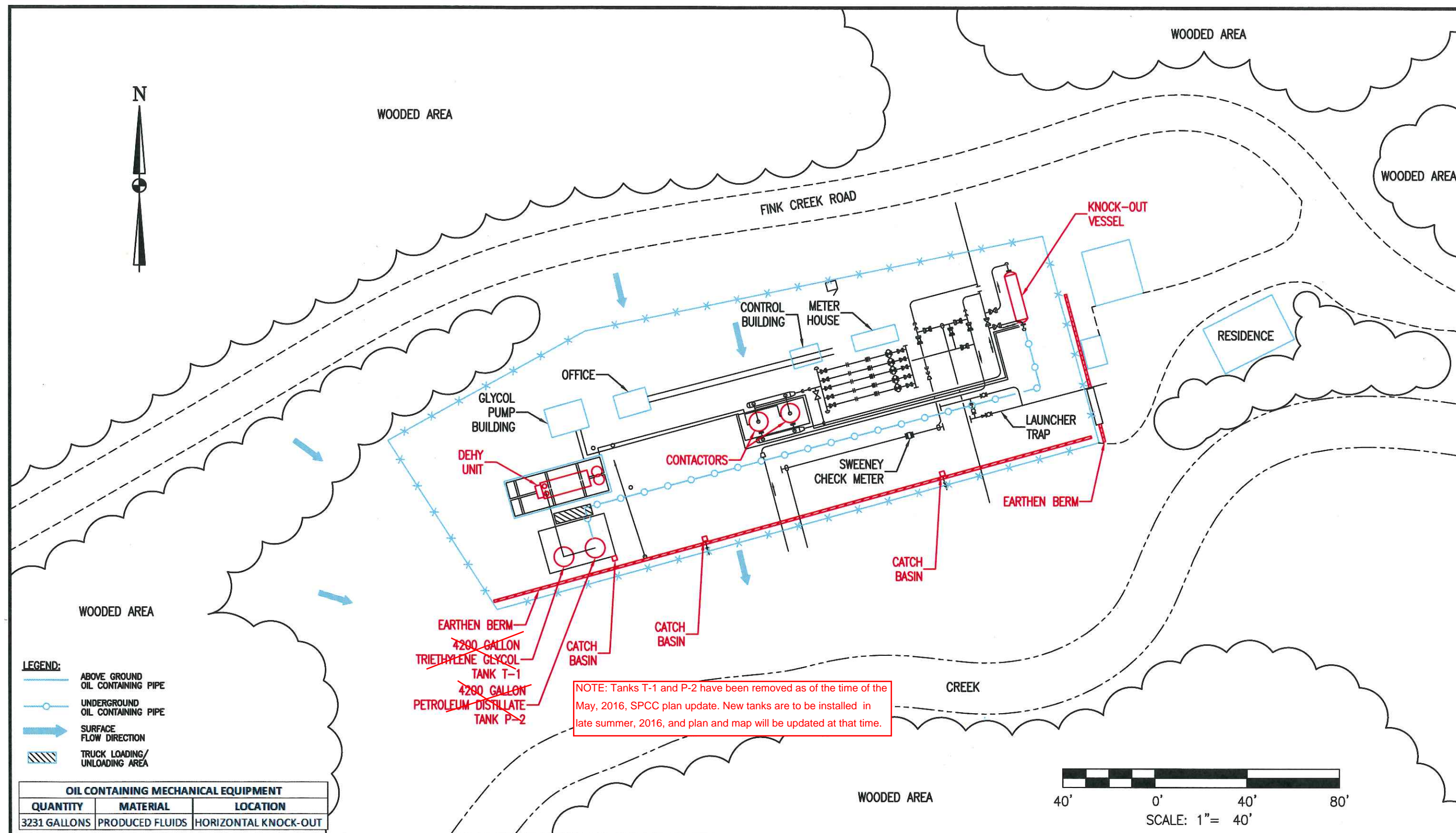


NOTE: THE OIL PIPING RUNS SHOWN ON THIS DRAWING ARE APPROXIMATE. FOR MORE DETAIL, REFER TO "AS-BUILT" DRAWINGS MAINTAINED BY DTI'S ENGINEERING AND DRAFTING DEPARTMENTS.

NOTE: MOBILE REFUELER TANKS OFTEN LOCATED ON SITE WHEN NOT MOUNTED ON TRUCKS. CAN VARY DURING THE COURSE OF THE YEAR.

OIL CONTAINING MECHANICAL EQUIPMENT		
QUANTITY	MATERIAL	LOCATION
4 @ 250 GALLONS EACH	LUBE OIL	COMPRESSOR BUILDING COMPRESSOR ENGINES
4 @ 112 GALLONS EACH	PRODUCED FLUIDS	COOLER SEPARATORS
987 GALLONS	PRODUCED FLUIDS	INTERMEDIATE FILTER SEPARATOR
3 @ 2585 GALLONS EACH	PRODUCED FLUIDS	SUCTION SEPARATORS
2 @ 2260 GALLONS EACH	PRODUCED FLUIDS	TL-344 SEPARATORS
2 @ 81 GALLONS EACH	LUBE OIL	CATERPILLAR 3512 GENERATORS

SYM.	DATE	BY	REVISION DESCRIPTION	PRJ/TSK	APP.	SCALE	1" = 60'	DATE	Dominion Transmission, Inc.			
8	05/17/2016	JAR	ADDED PIPING BETWEEN SEPERATORS AND TANKS E-2 AND I-2 AND LOADING AREA			DRAWN	DJF	11/06/09	925 White Oaks Blvd. Bridgeport, West Virginia 26330 / Phone: (681) 842-3000			
7	09/21/15	TBB	ADDED FENCE AROUND WAREHOUSE, REVISED TANKS P-1 & I-2, AND ADDED NOTE			CHECKED	RRE		FOR: SWEENEY COMPRESSOR STATION			
6	02/12/15	TBB	CHANGED TANK I-3 TO P-1			APP. FOR BID			TITLE: ENVIRONMENTAL EMERGENCY SITE PLAN			
5	11/14/14	TBB	SCALED, ADDED BAR SCALE, ADDED ADJACENT PROPERTIES, & REVISED NORTH ARROW			APP. FOR CONST.			DIR: DOCUMENTUM	GROUP: PD	DWG. NO. X8444C	REV. 8
4	07/30/13	TBB	UPDATED PER TIM JACKSONS MARK UPS			TOWN: VADIS, WV	COUNTY: LEWIS		FILE: PRJ/TSK:			



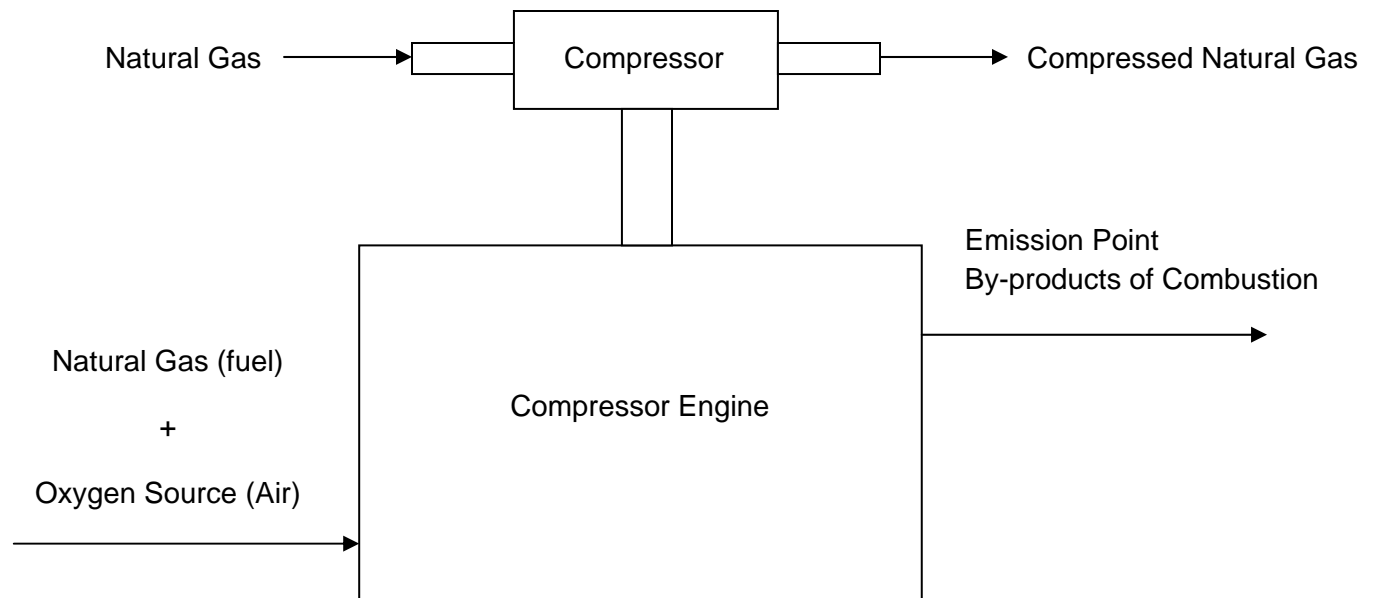
SYM.	DATE	BY	REVISION DESCRIPTION	PRJ/TSK	APP.	SCALE	1" = 40'	DATE	Dominion Transmission, Inc. 925 White Oaks Blvd., Bridgeport, WV 26330 Phone: 681-842-3000			
6	09/21/15	TBB	CHANGED SEPARATOR TO KNOCK-OUT VESSEL AND REVISED TABLE			DRAWN	DJF	01/07/10	FOR: DRY FORK 2 M&R			
5	02/12/15	TBB	CHANGE TANK 1-3 TO P-2			CHECKED	JSS		TITLE: ENVIRONMENTAL EMERGENCY SITE PLAN			
4	10/14/14	TBB	VERIFIED SCALED, ADDED ADJACENT PROPERTIES, & ADDED BAR SCALE			APP. FOR BID			DIR: DOCUMENTUM			
3	07/29/13	TBB	UPDATED PER TIM JACKSONS MARK UPS			APP. FOR CONST.			GROUP: PD			
2	01/24/13	TBB	ADDED NEW DEHY UNIT - 2011 CONSTRUCTION			TOWN:		COUNTY: LEWIS	DWG. NO. X5731			
						FILE:	PRJ/TSK:		REV. 6			

## **Attachment C**

### Process Flow Diagrams

**Dominion Transmission, Inc.**  
**Sweeney Compressor Station**

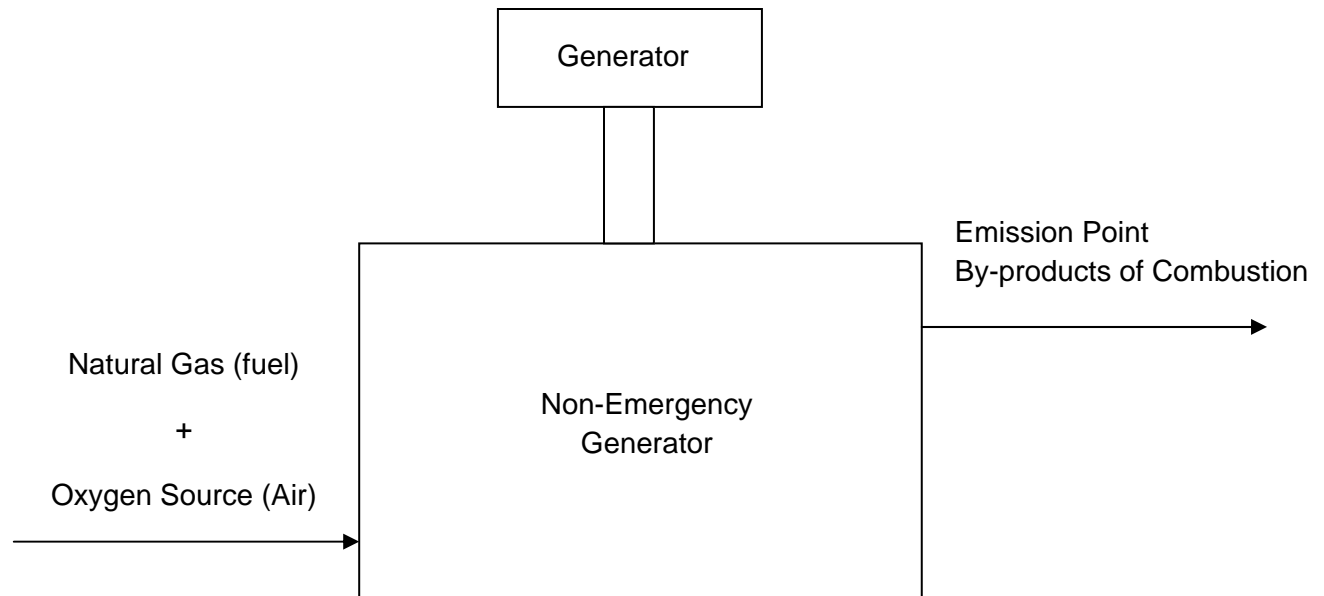
**Compressor Engines (EN01 – EN04) Process Flow Diagram**





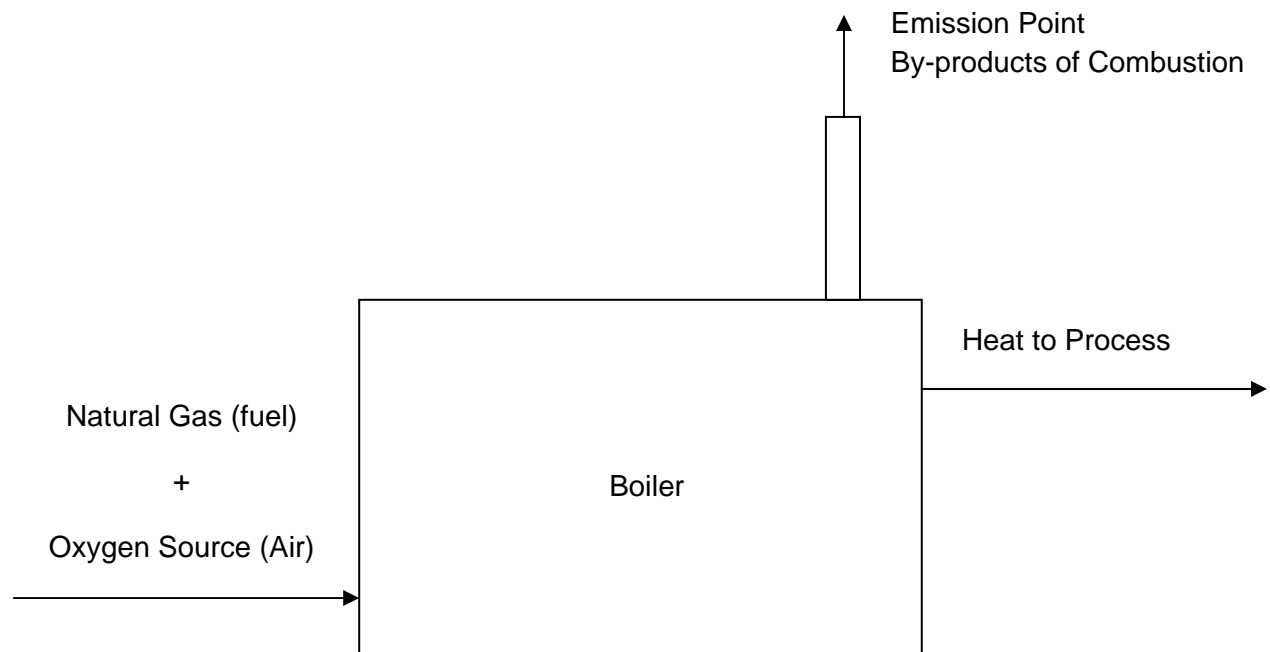
**Dominion Transmission, Inc.**  
**Sweeney Compressor Station**

**Non-Emergency Auxiliary Generators (AUX03 and AUX04) Process Flow Diagram**



**Dominion Transmission, Inc.**  
**Sweeney Compressor Station**

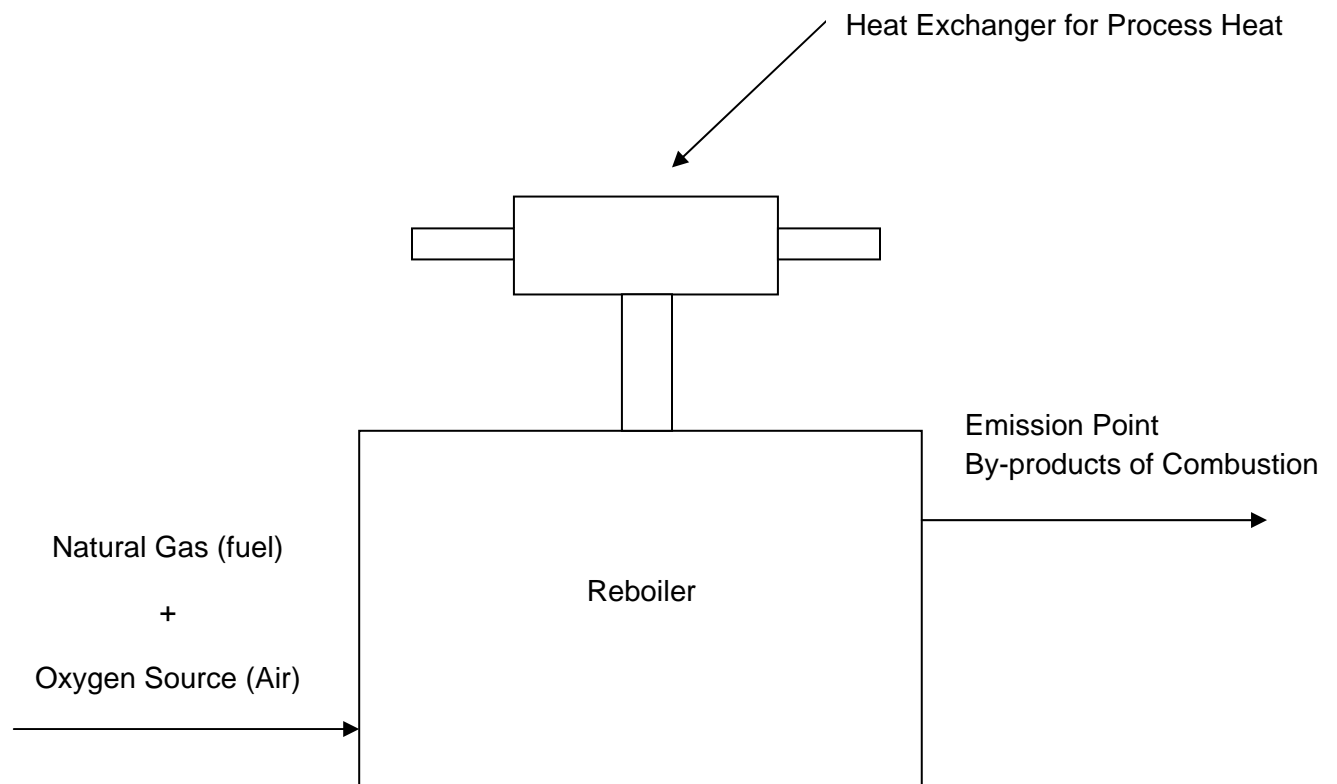
**Boiler (BLR02) Process Flow Diagram**



**Dominion Transmission, Inc.**

**Sweeney Compressor Station**

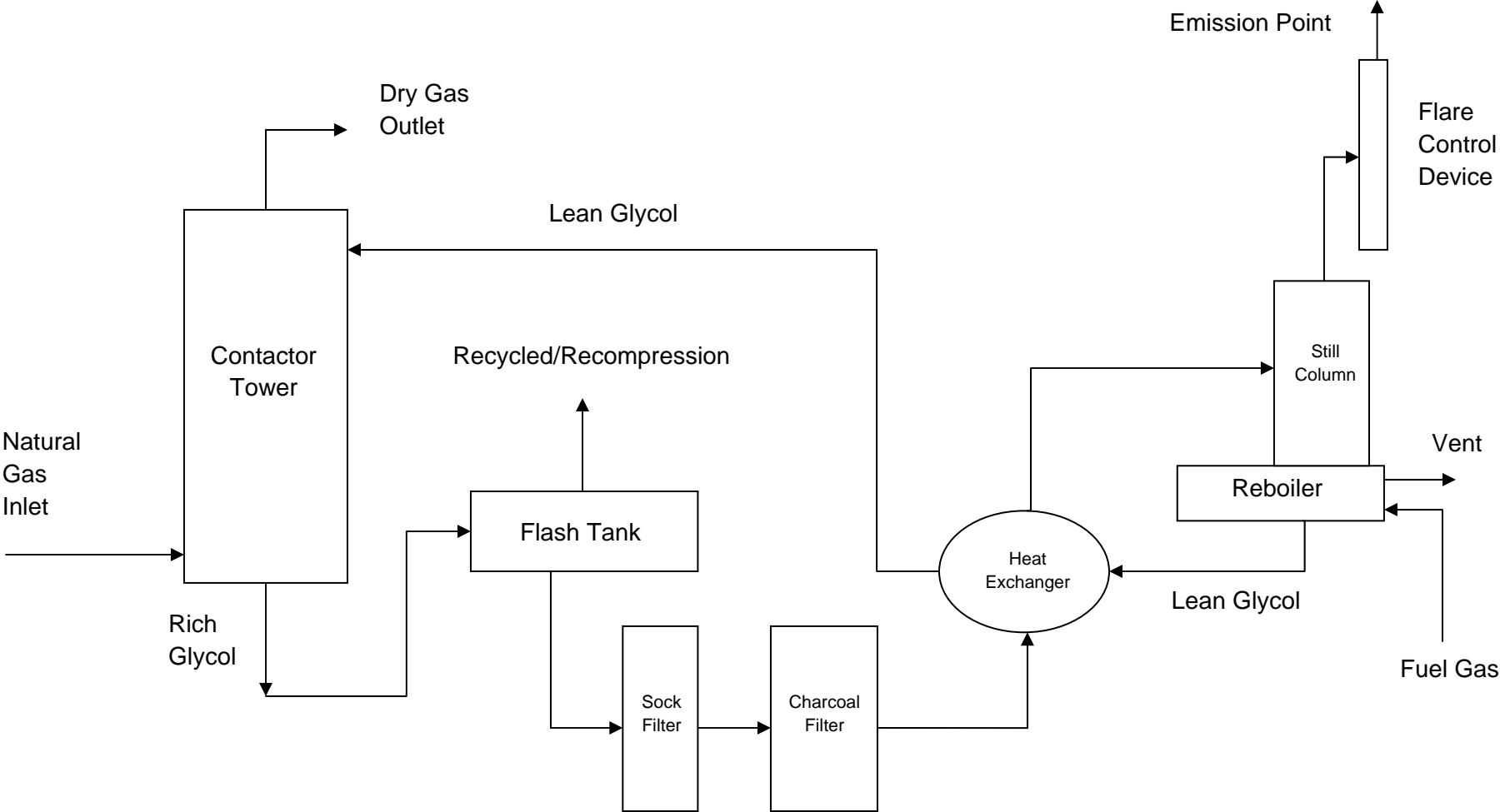
**Reboiler (RBR02) Process Flow Diagram**



**Dominion Transmission, Inc.**

**Sweeney Compressor Station**

**Dehydration Unit (FL02, DEHY02, and RBR02) Process Flow Diagram**



## **Attachment D**

Title V Equipment Table

**ATTACHMENT D - Title V Equipment Table**  
**(includes all emission units at the facility except those designated as**  
**insignificant activities in Section 4, Item 24 of the General Forms)**

Emission Point ID <sup>1</sup>	Control Device <sup>1</sup>	Emission Unit ID <sup>1</sup>	Emission Unit Description	Design Capacity	Year Installed/Modified
EN01	N/A	EN01	Reciprocating Engine/Integral Compressor; Cooper GMVA-10	1,350 hp	1956
EN02	N/A	EN02	Reciprocating Engine/Integral Compressor; Cooper GMVA-10	1,350 hp	1956
EN03	N/A	EN03	Reciprocating Engine/Integral Compressor; Cooper GMVA-10	1,350 hp	1956
EN04	N/A	EN04	Reciprocating Engine/Integral Compressor; Cooper GMVA-10	1,350 hp	1956
AUX03	N/A	AUX03	Non-Emergency Auxiliary Generator; Caterpillar G3512	813 hp	1996
AUX04	N/A	AUX04	Non-Emergency Auxiliary Generator; Caterpillar G3512	813 hp	1996
DEHY02	FL02	DEHY02	Dehydration Unit Still; Cameron	320 MMcf/day	2011
RBR02	N/A	RBR02	Dehydration Unit Reboiler; Cameron	1.47 MMBtu/hr	2011
FL02	N/A	2E	Dehydration Unit Still Flare; QTI Q100	4.0 MMBtu/hr	2011
TK01	N/A	TK01	Vertical Lube Oil Tank	10,000 Gallon	2002
TK02	N/A	TK02	Vertical Lube Oil Tank	10,000 Gallon	2002
TK03	N/A	TK03	Horizontal Ethylene Glycol Tank	5,000 Gallon	2002
TK05	N/A	TK05	Vertical Used Oil Tank	2,520 Gallon	2002
TK06	N/A	TK06	Horizontal Used Oil Tank	300 Gallon	2002
New units (and updates) to equipment list:					
BLR02	N/A	BLR02	Boiler; Cleaver Brooks	3.5 MMBtu/hr	2016
TK07	N/A	TK07	Vertical Distillate Oil Tank	2,520 Gallon	2002
TK10	N/A	TK10	Horizontal Produced Fluids Tank	2,000 Gallon	2010
TK11	N/A	TK11	Horizontal Produced Fluids Tank	1,000 Gallon	2010
TK12	N/A	TK12	Horizontal Lube Oil 7-Chambered Tank	455 Gallon	Pre-2003
TK13	N/A	TK13	Horizontal Triethylene Glycol Tank	1,000 Gallon	2016
TK14	N/A	TK14	Horizontal Distillate Oil tank	4,000 Gallon	2016
Units that have been removed:					
CPR01	N/A	CPR01	Air Compressor; Waukesha XAHU-5746X, Emergency Use	50 hp	1956
HTR01	N/A	HTR01	Pipeline Heater; Parkersburg IH3000	3.0 MMBtu/hr	1961
BLR01	N/A	BLR01	Boiler; Weil-McLain	3.74 MMBtu/hr	1979

Title V Equipment Table (equipment\_table.doc)

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Page \_\_1\_\_ of \_\_2\_\_

Revised 4/11/05

TK04	N/A	TK04	Horizontal Methanol Tank	65 Gallon	2002
TK08	N/A	TK08	Vertical Triethylene Glycol Tank	4,200 Gallon	2002
TK09	N/A	TK09	Vertical Ethylene Glycol Tank	4,200 Gallon	2002

<sup>1</sup>For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

## **Attachment E**

### Emission Unit Forms



## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> AUX03	<b>Emission unit name:</b> AUX03 Non-Emergency Generator	<b>List any control devices associated with this emission unit:</b> NA
--	--	---

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Natural gas-fired non-emergency auxiliary generator

<b>Manufacturer:</b> Caterpillar	<b>Model number:</b> G3512	<b>Serial number:</b> 7NJ00205
-------------------------------------	-------------------------------	-----------------------------------

<b>Construction date:</b>	<b>Installation date:</b> 1996	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
813 hp

<b>Maximum Hourly Throughput:</b> 8,943 scf/hr	<b>Maximum Annual Throughput:</b> 78.34 MMscf/yr	<b>Maximum Operating Schedule:</b> 8760 hrs/yr
---	---	---

### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
--	---

<b>Maximum design heat input and/or maximum horsepower rating:</b> 813 hp	<b>Type and Btu/hr rating of burners:</b> 8.94 MMBtu/hr
--	--

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Pipeline quality natural gas  
 - Maximum hourly fuel usage = 8,943 scf/hr  
 - Maximum annual fuel usage = 78.34 MMscf/yr

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Pipeline quality natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	2.94	12.88
Nitrogen Oxides (NO <sub>x</sub> )	3.58	15.68
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.08	0.37
Particulate Matter (PM <sub>10</sub> )	0.08	0.37
Total Particulate Matter (TSP)	0.17	0.76
Sulfur Dioxide (SO <sub>2</sub> )	0.01	0.02
Volatile Organic Compounds (VOC)	1.13	4.95
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.02	0.11
Acrolein	0.02	0.10
Benzene	0.01	0.06
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.18	0.80
Toluene	0.01	0.02
Xylene	< 0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <ul style="list-style-type: none"> <li>- CO, NO<sub>x</sub>, and VOC emission rates based on manufacturer specs.</li> <li>- PM, SO<sub>2</sub>, and HAP emissions calculated from AP-42, Section 3.2, Natural Gas-Fired Reciprocating Engines, Table 3.2-1, 7/00</li> </ul>		

### ***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

**\*\*Note:** This unit is a non-emergency “remote” unit under NESHAP Subpart ZZZZ. Therefore, the requirements below are based off of that category and not of the conditions in the Title V permit (which are not for non-emergency remote units).

40 CFR Part 63 Subpart ZZZZ – NESHAP maintenance requirements  
40 CFR Part 63 Subpart ZZZZ – NESHAP operating requirements  
40 CFR Part 63 Subpart ZZZZ – NESHAP continuous compliance requirements  
40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions

\_\_\_\_ Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

40 CFR Part 63 Subpart ZZZZ – Change oil and filter, inspect spark plugs, and inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, or implement an oil analysis program (63.6595(a)(1), 63.6603, and Table 2d)  
40 CFR Part 63 Subpart ZZZZ – Operate and maintain the RICE according to the manufacturer’s instructions OR develop and follow your own maintenance plan (63.6625(e)(5), 63.6640(a), and Table 6)  
40 CFR Part 63 Subpart ZZZZ – Evaluate the status of the RICE every 12 months to determine the remote status (63.6603(f))  
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable general requirements/provisions (63.6605)  
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable recordkeeping requirements, which includes records of malfunctions and maintenance (63.6640, 63.6655, 63.10(b)(1))

**Are you in compliance with all applicable requirements for this emission unit?** ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> AUX04	<b>Emission unit name:</b> AUX04 Non-Emergency Generator	<b>List any control devices associated with this emission unit:</b> NA
--	--	---

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Natural gas-fired non-emergency auxiliary generator

<b>Manufacturer:</b> Caterpillar	<b>Model number:</b> G3512	<b>Serial number:</b> 7NJ00206
<b>Construction date:</b>	<b>Installation date:</b> 1996	<b>Modification date(s):</b> N/A

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
813 hp

<b>Maximum Hourly Throughput:</b> 8,943 scf/hr	<b>Maximum Annual Throughput:</b> 78.34 MMscf/yr	<b>Maximum Operating Schedule:</b> 8760 hrs/yr
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b> 813 hp	<b>Type and Btu/hr rating of burners:</b> 8.94 MMBtu/hr
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Pipeline quality natural gas  
 - Maximum hourly fuel usage = 8,943 scf/hr  
 - Maximum annual fuel usage = 78.34 MMscf/yr

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Pipeline quality natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	2.94	12.88
Nitrogen Oxides (NO <sub>x</sub> )	3.58	15.68
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.08	0.37
Particulate Matter (PM <sub>10</sub> )	0.08	0.37
Total Particulate Matter (TSP)	0.17	0.76
Sulfur Dioxide (SO <sub>2</sub> )	0.01	0.02
Volatile Organic Compounds (VOC)	1.13	4.95
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.02	0.11
Acrolein	0.02	0.10
Benzene	0.01	0.06
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.18	0.80
Toluene	0.01	0.02
Xylene	< 0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <ul style="list-style-type: none"> <li>- CO, NO<sub>x</sub>, and VOC emission rates based on manufacturer specs.</li> <li>- PM, SO<sub>2</sub>, and HAP emissions calculated from AP-42, Section 3.2, Natural Gas-Fired Reciprocating Engines, Table 3.2-1, 7/00</li> </ul>		

### ***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

**\*\*Note:** This unit is a non-emergency “remote” unit under NESHAP Subpart ZZZZ. Therefore, the requirements below are based off of that category and not of the conditions in the Title V permit (which are not for non-emergency remote units).

40 CFR Part 63 Subpart ZZZZ – NESHAP maintenance requirements  
40 CFR Part 63 Subpart ZZZZ – NESHAP operating requirements  
40 CFR Part 63 Subpart ZZZZ – NESHAP continuous compliance requirements  
40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions

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**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

40 CFR Part 63 Subpart ZZZZ – Change oil and filter, inspect spark plugs, and inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, or implement an oil analysis program (63.6595(a)(1), 63.6603, and Table 2d)  
40 CFR Part 63 Subpart ZZZZ – Operate and maintain the RICE according to the manufacturer’s instructions OR develop and follow your own maintenance plan (63.6625(e)(5), 63.6640(a), and Table 6)  
40 CFR Part 63 Subpart ZZZZ – Evaluate the status of the RICE every 12 months to determine the remote status (63.6603(f))  
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable general requirements/provisions (63.6605)  
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable recordkeeping requirements, which includes records of malfunctions and maintenance (63.6640, 63.6655, 63.10(b)(1))

**Are you in compliance with all applicable requirements for this emission unit?** ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> BLR02	<b>Emission unit name:</b> BLR02 Boiler	<b>List any control devices associated with this emission unit:</b> N/A
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Natural gas-fired boiler

<b>Manufacturer:</b> Cleaver Brooks	<b>Model number:</b> FLX-700-350-160HW (460/3/60)- STD/CFG	<b>Serial number:</b>
<b>Construction date:</b>	<b>Installation date:</b> 2016	<b>Modification date(s):</b> N/A

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**

3.5 MMBtu/hr

<b>Maximum Hourly Throughput:</b> 0.0035 MMscf/hr	<b>Maximum Annual Throughput:</b> 30.66 MMscf/yr	<b>Maximum Operating Schedule:</b> 8,760 hrs/yr
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b> 3.5 MMBtu/hr	<b>Type and Btu/hr rating of burners:</b> 0.0035 MMscf/hr
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Pipeline quality natural gas  
 - Maximum hourly fuel usage = 0.0035 MMscf/hr  
 - Maximum annual fuel usage = 30.66 MMscf/yr

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Pipeline quality natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.29	1.29
Nitrogen Oxides (NO <sub>x</sub> )	0.35	1.53
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	< 0.01	0.03
Particulate Matter (PM <sub>10</sub> )	< 0.01	0.03
Total Particulate Matter (TSP)	0.03	0.12
Sulfur Dioxide (SO <sub>2</sub> )	< 0.01	0.01
Volatile Organic Compounds (VOC)	0.02	0.08
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	< 0.01	< 0.01
Formaldehyde	< 0.01	< 0.01
Hexane	< 0.01	0.03
Toluene	< 0.01	< 0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <ul style="list-style-type: none"> <li>- NO<sub>x</sub> and CO emission factors from AP-42, Section 1.4, Natural Gas Combustion, Table 1.4-1, 7/98</li> <li>- PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, and VOC emission factors from AP-42, Section 1.4, Natural Gas Combustion, Table 1.4-2, 7/98</li> <li>- HAP emission factors from AP-42, Section 1.4, Natural Gas Combustion, Tables 1.4-3, 4, 7/98</li> </ul>		



***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

\*\*Note: The new boiler (BLR02) has not been incorporated in the Title V yet, but it is assumed that the previous boiler (BLR01) conditions would apply as stated below:

45 CSR 2-3.1 and 13 – Opacity limit of 10% on a six minute block average (TV 4.1.1)

45 CSR 13 – The reboiler shall not exceed 1.47 MMBtu/hr (TV 4.1.2)

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**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

\*\*Note: The new boiler (BLR02) has not been incorporated in the Title V yet, but it is assumed that the previous boiler (BLR01) conditions would apply as stated below:

45 CSR and 13 – Compliance with TV 4.1.1 is demonstrated by a Method 9, if required (TV 4.2.1)

**Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No**

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> DEHY02	<b>Emission unit name:</b> DEHY02 Glycol Dehydration Unit	<b>List any control devices associated with this emission unit:</b> FL02 Flare
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Dehydration unit still column

<b>Manufacturer:</b> Cameron	<b>Model number:</b> SHV-3	<b>Serial number:</b>
<b>Construction date:</b>	<b>Installation date:</b> 2011	<b>Modification date(s):</b> N/A

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**

320 MMscf/day

<b>Maximum Hourly Throughput:</b> 320 MMscf/day (daily)	<b>Maximum Annual Throughput:</b> 116,800 MMscf/yr	<b>Maximum Operating Schedule:</b> 8,760 hrs/yr
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b>	<b>Type and Btu/hr rating of burners:</b>
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Natural gas

- Maximum daily wet gas throughput = 320 MMscf/day
- Maximum annual wet gas throughput = 116,800 MMscf/yr

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxides (NO <sub>x</sub> )	N/A	N/A
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	N/A	N/A
Particulate Matter (PM <sub>10</sub> )	N/A	N/A
Total Particulate Matter (TSP)	N/A	N/A
Sulfur Dioxide (SO <sub>2</sub> )	N/A	N/A
Volatile Organic Compounds (VOC)	0.81	3.55
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.03	0.11
Ethylbenzene	0.42	1.82
n-Hexane	< 0.01	< 0.01
Toluene	0.05	0.22
Xylenes	0.24	1.06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Emission rates for the dehydration unit were obtained from GRI GLYCalc 4.0 with a 99% destruction efficiency from the flare.</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

45 CSR 13 – The maximum wet natural gas throughput shall not exceed 320 MMscf/day or 116,800 MMscf/yr, using a 12 month rolling total (TV 5.1.7; R13-2498B 4.1.3)

45 CSR 13 – The dehydration unit shall be equipped with a flare to control VOC emissions (TV 5.1.8; R13-2498B 4.1.7)

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**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

45 CSR 13 – Wet gas throughput shall be monitored on a monthly basis; keep records (TV 5.4.6; R13-2498B 4.4.11)

**Are you in compliance with all applicable requirements for this emission unit?** ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> EN01	<b>Emission unit name:</b> EN01 Reciprocating Engine/Integral Compressor	<b>List any control devices associated with this emission unit:</b> N/A
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Natural gas fired reciprocating engine/integral compressor

<b>Manufacturer:</b> Cooper	<b>Model number:</b> GMVA-10	<b>Serial number:</b> 44071
<b>Construction date:</b>	<b>Installation date:</b> 1956	<b>Modification date(s):</b> N/A

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
1,350 hp

<b>Maximum Hourly Throughput:</b> 0.0104 MMscf/hr	<b>Maximum Annual Throughput:</b> 91.06 MMscf/yr	<b>Maximum Operating Schedule:</b> 8,760 hrs/yr
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> _X_ Yes <input type="checkbox"/> No	<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> _X_ Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b> 1,350 hp	<b>Type and Btu/hr rating of burners:</b> 7,700 Btu/hp-hr 0.0104 MMscf/hr
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Pipeline quality natural gas  
 - Maximum hourly fuel usage = 0.0104 MMscf/hr  
 - Maximum annual fuel usage = 91.06 MMscf/yr

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Pipeline quality natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	8.93	39.11
Nitrogen Oxides (NO <sub>x</sub> )	60.30	264.11
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.40	1.75
Particulate Matter (PM <sub>10</sub> )	0.40	1.75
Total Particulate Matter (TSP)	0.50	2.20
Sulfur Dioxide (SO <sub>2</sub> )	0.01	0.03
Volatile Organic Compounds (VOC)	6.79	29.74
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.08	0.35
Acrolein	0.08	0.35
Benzene	0.02	0.09
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.25	1.09
Hexane	< 0.01	0.02
Toluene	0.01	0.04
Xylene		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b> <ul style="list-style-type: none"> <li>- CO, NO<sub>x</sub>, and VOC emission rates based on manufacturer specs.</li> <li>- PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, and HAP emission factors based on AP-42 Section 3.2, Table 3.2-1, 8/00.</li> <li>- Formaldehyde emission rate based on November 2006 engine testing data (0.248 lb/hr).</li> </ul>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

40 CFR Part 63 Subpart ZZZZ – NESHAP maintenance requirements (TV 7.1.1.a)

40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions (TV 7.1.1.b and c)

40 CFR Part 63 Subpart ZZZZ – NESHAP continuous compliance requirements (TV 7.1.1.d)

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**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

40 CFR Part 63 Subpart ZZZZ – Change oil and filter, inspect spark plugs, and inspect all hoses and belts every 4,320 hours of operation or annually, whichever one first, or utilize an oil analysis program (TV 7.1.1.a and 7.2.1)

40 CFR Part 63 Subpart ZZZZ – Operate and maintain the RICE according to the manufacturer's instructions OR develop and follow your own maintenance plan (TV 7.1.1.d and 7.2.1)

40 CFR Part 63 Subpart ZZZZ – Minimize the engine's time spent at idling during startup, not to exceed 30 minutes (TV 7.2.1)

40 CFR Part 63 Subpart ZZZZ - Comply with all applicable recordkeeping requirements (TV 7.4.1)

40 CFR Part 63 Subpart ZZZZ – Keep records of maintenance on the stationary RICE (TV 7.4.1)

40 CFR Part 63 Subpart ZZZZ – Keep records of malfunctions on the stationary RICE (TV 7.4.1)

40 CFR Part 63 Subpart ZZZZ – Permit deviation reporting (TV 7.5.1 and 7.5.2)

**Are you in compliance with all applicable requirements for this emission unit?** ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> EN02	<b>Emission unit name:</b> EN02 Reciprocating Engine/Integral Compressor	<b>List any control devices associated with this emission unit:</b> N/A
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Natural gas fired reciprocating engine/integral compressor

<b>Manufacturer:</b> Cooper	<b>Model number:</b> GMVA-10	<b>Serial number:</b> 44072
<b>Construction date:</b>	<b>Installation date:</b> 1956	<b>Modification date(s):</b> N/A

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
1,350 hp

<b>Maximum Hourly Throughput:</b> 0.0104 MMscf/hr	<b>Maximum Annual Throughput:</b> 91.06 MMscf/yr	<b>Maximum Operating Schedule:</b> 8,760 hrs/yr
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> _X_ Yes <input type="checkbox"/> No	<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> _X_ Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b> 1,350 hp	<b>Type and Btu/hr rating of burners:</b> 7,700 Btu/hp-hr 0.0104 MMscf/hr
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Pipeline quality natural gas  
 - Maximum hourly fuel usage = 0.0104 MMscf/hr  
 - Maximum annual fuel usage = 91.06 MMscf/yr

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Pipeline quality natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf



<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	8.93	39.11
Nitrogen Oxides (NO <sub>x</sub> )	60.30	264.11
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.40	1.75
Particulate Matter (PM <sub>10</sub> )	0.40	1.75
Total Particulate Matter (TSP)	0.50	2.20
Sulfur Dioxide (SO <sub>2</sub> )	0.01	0.03
Volatile Organic Compounds (VOC)	6.79	29.74
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.08	0.35
Acrolein	0.08	0.35
Benzene	0.02	0.09
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.25	1.09
Hexane	< 0.01	0.02
Toluene	0.01	0.04
Xylene		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b> <ul style="list-style-type: none"> <li>- CO, NO<sub>x</sub>, and VOC emission rates based on manufacturer specs.</li> <li>- PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, and HAP emission factors based on AP-42 Section 3.2, Table 3.2-1, 8/00.</li> <li>- Formaldehyde emission rate based on November 2006 engine testing data (0.248 lb/hr).</li> </ul>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

40 CFR Part 63 Subpart ZZZZ – NESHAP maintenance requirements (TV 7.1.1.a)

40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions (TV 7.1.1.b and c)

40 CFR Part 63 Subpart ZZZZ – NESHAP continuous compliance requirements (TV 7.1.1.d)

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**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

40 CFR Part 63 Subpart ZZZZ – Change oil and filter, inspect spark plugs, and inspect all hoses and belts every 4,320 hours of operation or annually, whichever one first, or utilize an oil analysis program (TV 7.1.1.a and 7.2.1)

40 CFR Part 63 Subpart ZZZZ – Operate and maintain the RICE according to the manufacturer's instructions OR develop and follow your own maintenance plan (TV 7.1.1.d and 7.2.1)

40 CFR Part 63 Subpart ZZZZ – Minimize the engine's time spent at idling during startup, not to exceed 30 minutes (TV 7.2.1)

40 CFR Part 63 Subpart ZZZZ - Comply with all applicable recordkeeping requirements (TV 7.4.1)

40 CFR Part 63 Subpart ZZZZ – Keep records of maintenance on the stationary RICE (TV 7.4.1)

40 CFR Part 63 Subpart ZZZZ – Keep records of malfunctions on the stationary RICE (TV 7.4.1)

40 CFR Part 63 Subpart ZZZZ – Permit deviation reporting (TV 7.5.1 and 7.5.2)

**Are you in compliance with all applicable requirements for this emission unit?** ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> EN03	<b>Emission unit name:</b> EN03 Reciprocating Engine/Integral Compressor	<b>List any control devices associated with this emission unit:</b> N/A
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Natural gas fired reciprocating engine/integral compressor

<b>Manufacturer:</b> Cooper	<b>Model number:</b> GMVA-10	<b>Serial number:</b> 44073
<b>Construction date:</b>	<b>Installation date:</b> 1956	<b>Modification date(s):</b> N/A

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
1,350 hp

<b>Maximum Hourly Throughput:</b> 0.0104 MMscf/hr	<b>Maximum Annual Throughput:</b> 91.06 MMscf/yr	<b>Maximum Operating Schedule:</b> 8,760 hrs/yr
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b> 1,350 hp	<b>Type and Btu/hr rating of burners:</b> 7,700 Btu/hp-hr 0.0104 MMscf/hr
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Pipeline quality natural gas  
 - Maximum hourly fuel usage = 0.0104 MMscf/hr  
 - Maximum annual fuel usage = 91.06 MMscf/yr

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Pipeline quality natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	8.93	39.11
Nitrogen Oxides (NO <sub>x</sub> )	60.30	264.11
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.40	1.75
Particulate Matter (PM <sub>10</sub> )	0.40	1.75
Total Particulate Matter (TSP)	0.50	2.20
Sulfur Dioxide (SO <sub>2</sub> )	0.01	0.03
Volatile Organic Compounds (VOC)	6.79	29.74
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.08	0.35
Acrolein	0.08	0.35
Benzene	0.02	0.09
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.25	1.09
Hexane	< 0.01	0.02
Toluene	0.01	0.04
Xylene		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b> <ul style="list-style-type: none"> <li>- CO, NO<sub>x</sub>, and VOC emission rates based on manufacturer specs.</li> <li>- PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, and HAP emission factors based on AP-42 Section 3.2, Table 3.2-1, 8/00.</li> <li>- Formaldehyde emission rate based on November 2006 engine testing data (0.248 lb/hr).</li> </ul>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

40 CFR Part 63 Subpart ZZZZ – NESHAP maintenance requirements (TV 7.1.1.a)

40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions (TV 7.1.1.b and c)

40 CFR Part 63 Subpart ZZZZ – NESHAP continuous compliance requirements (TV 7.1.1.d)

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**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

40 CFR Part 63 Subpart ZZZZ – Change oil and filter, inspect spark plugs, and inspect all hoses and belts every 4,320 hours of operation or annually, whichever one first, or utilize an oil analysis program (TV 7.1.1.a and 7.2.1)

40 CFR Part 63 Subpart ZZZZ – Operate and maintain the RICE according to the manufacturer's instructions OR develop and follow your own maintenance plan (TV 7.1.1.d and 7.2.1)

40 CFR Part 63 Subpart ZZZZ – Minimize the engine's time spent at idling during startup, not to exceed 30 minutes (TV 7.2.1)

40 CFR Part 63 Subpart ZZZZ - Comply with all applicable recordkeeping requirements (TV 7.4.1)

40 CFR Part 63 Subpart ZZZZ – Keep records of maintenance on the stationary RICE (TV 7.4.1)

40 CFR Part 63 Subpart ZZZZ – Keep records of malfunctions on the stationary RICE (TV 7.4.1)

40 CFR Part 63 Subpart ZZZZ – Permit deviation reporting (TV 7.5.1 and 7.5.2)

**Are you in compliance with all applicable requirements for this emission unit?** ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> EN04	<b>Emission unit name:</b> EN04 Reciprocating Engine/Integral Compressor	<b>List any control devices associated with this emission unit:</b> N/A
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Natural gas fired reciprocating engine/integral compressor

<b>Manufacturer:</b> Cooper	<b>Model number:</b> GMVA-10	<b>Serial number:</b> 44074
<b>Construction date:</b>	<b>Installation date:</b> 1956	<b>Modification date(s):</b> N/A

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
1,350 hp

<b>Maximum Hourly Throughput:</b> 0.0104 MMscf/hr	<b>Maximum Annual Throughput:</b> 91.06 MMscf/yr	<b>Maximum Operating Schedule:</b> 8,760 hrs/yr
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b> 1,350 hp	<b>Type and Btu/hr rating of burners:</b> 7,700 Btu/hp-hr 0.0104 MMscf/hr
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Pipeline quality natural gas  
 - Maximum hourly fuel usage = 0.0104 MMscf/hr  
 - Maximum annual fuel usage = 91.06 MMscf/yr

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Pipeline quality natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	8.93	39.11
Nitrogen Oxides (NO <sub>x</sub> )	60.30	264.11
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.40	1.75
Particulate Matter (PM <sub>10</sub> )	0.40	1.75
Total Particulate Matter (TSP)	0.50	2.20
Sulfur Dioxide (SO <sub>2</sub> )	0.01	0.03
Volatile Organic Compounds (VOC)	6.79	29.74
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.08	0.35
Acrolein	0.08	0.35
Benzene	0.02	0.09
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.25	1.09
Hexane	< 0.01	0.02
Toluene	0.01	0.04
Xylene		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b> <ul style="list-style-type: none"> <li>- CO, NO<sub>x</sub>, and VOC emission rates based on manufacturer specs.</li> <li>- PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, and HAP emission factors based on AP-42 Section 3.2, Table 3.2-1, 8/00.</li> <li>- Formaldehyde emission rate based on November 2006 engine testing data (0.248 lb/hr).</li> </ul>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

40 CFR Part 63 Subpart ZZZZ – NESHAP maintenance requirements (TV 7.1.1.a)

40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions (TV 7.1.1.b and c)

40 CFR Part 63 Subpart ZZZZ – NESHAP continuous compliance requirements (TV 7.1.1.d)

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**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

40 CFR Part 63 Subpart ZZZZ – Change oil and filter, inspect spark plugs, and inspect all hoses and belts every 4,320 hours of operation or annually, whichever one first, or utilize an oil analysis program (TV 7.1.1.a and 7.2.1)

40 CFR Part 63 Subpart ZZZZ – Operate and maintain the RICE according to the manufacturer's instructions OR develop and follow your own maintenance plan (TV 7.1.1.d and 7.2.1)

40 CFR Part 63 Subpart ZZZZ – Minimize the engine's time spent at idling during startup, not to exceed 30 minutes (TV 7.2.1)

40 CFR Part 63 Subpart ZZZZ - Comply with all applicable recordkeeping requirements (TV 7.4.1)

40 CFR Part 63 Subpart ZZZZ – Keep records of maintenance on the stationary RICE (TV 7.4.1)

40 CFR Part 63 Subpart ZZZZ – Keep records of malfunctions on the stationary RICE (TV 7.4.1)

40 CFR Part 63 Subpart ZZZZ – Permit deviation reporting (TV 7.5.1 and 7.5.2)

**Are you in compliance with all applicable requirements for this emission unit?** ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.



## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> FL02	<b>Emission unit name:</b> 2E Flare	<b>List any control devices associated with this emission unit:</b> N/A
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Dehydration Unit Flare

<b>Manufacturer:</b> Questor	<b>Model number:</b> Q100	<b>Serial number:</b>
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<b>Construction date:</b>	<b>Installation date:</b> 2011	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**

Combustor Rating: 4.0 MMBtu/hr

Pilot Burner: 0.05 MMBtu/hr

<b>Maximum Hourly Throughput:</b> Fuel to pilot flame: 492 scf/hr	<b>Maximum Annual Throughput:</b> Fuel to pilot flame: 4.31 MMscf/yr	<b>Maximum Operating Schedule:</b> 8760 hrs/yr
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b> Combustor Rating: 4.0 MMBtu/hr Pilot Burner: 0.05 MMBtu/hr	<b>Type and Btu/hr rating of burners:</b> Combustor Rating: 4.0 MMBtu/hr Pilot Burner: 0.05 MMBtu/hr
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Natural gas

- Maximum hourly fuel to pilot throughput = 492 scf/hr
- Maximum annual fuel to pilot throughput = 4.31 MMscf/yr

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.03	0.15
Nitrogen Oxides (NO <sub>x</sub> )	0.48	2.09
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	N/A	N/A
Particulate Matter (PM <sub>10</sub> )	N/A	N/A
Total Particulate Matter (TSP)	N/A	N/A
Sulfur Dioxide (SO <sub>2</sub> )	N/A	N/A
Volatile Organic Compounds (VOC)	< 0.01	0.01
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	N/A	N/A
Formaldehyde	N/A	N/A
n-Hexane	N/A	N/A
Toluene	N/A	N/A
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <ul style="list-style-type: none"> <li>- NOX and CO emission factor from Dominion Spec Sheet, 3/28/11</li> <li>- VOC emission factor from AP-42 Section 1.4 (7/98)</li> </ul>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

Requirements are listed under Attachment G – Air Pollution Control Device Form.

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**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Requirements are listed under Attachment G – Air Pollution Control Device Form.

**Are you in compliance with all applicable requirements for this emission unit?** ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> RBR02	<b>Emission unit name:</b> RBR02 Reboiler	<b>List any control devices associated with this emission unit:</b> N/A
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Natural gas-fired reboiler

<b>Manufacturer:</b> NATCO	<b>Model number:</b> 600/1000	<b>Serial number:</b>
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<b>Construction date:</b>	<b>Installation date:</b> 2011	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
1.47 MMBtu/hr

<b>Maximum Hourly Throughput:</b> 1,417 cf/hr	<b>Maximum Annual Throughput:</b> 12.41 MMscf/yr	<b>Maximum Operating Schedule:</b> 8,760 hrs/yr
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b> 1.47 MMBtu/hr	<b>Type and Btu/hr rating of burners:</b> 1.47 MMBtu/hr
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Natural Gas

- Maximum hourly fuel usage = 1,417 cf/hr
- Maximum annual fuel usage = 12.41 MMscf/yr

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Pipeline quality natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.10	0.44
Nitrogen Oxides (NO <sub>x</sub> )	0.13	0.57
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	< 0.01	0.01
Particulate Matter (PM <sub>10</sub> )	< 0.01	0.01
Total Particulate Matter (TSP)	0.01	0.05
Sulfur Dioxide (SO <sub>2</sub> )	< 0.01	< 0.01
Volatile Organic Compounds (VOC)	0.06	0.26
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	< 0.01	< 0.01
Formaldehyde	< 0.01	< 0.01
n-Hexane	< 0.01	0.01
Naphthalene	< 0.01	< 0.01
Toluene	< 0.01	<0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b> <ul style="list-style-type: none"> <li>- NO<sub>x</sub>, CO, and VOC emission factors from Dominion Spec Sheet 1/3/2011</li> <li>- VOC, PM, PM<sub>10</sub>, PM<sub>2.5</sub>, and SO<sub>2</sub> emission factors from AP-42, Section 1.4, Natural Gas Combustion, Table 1.4-2, 7/98</li> <li>- HAP emission factors from AP-42, Section 1.4, Natural Gas Combustion, Tables 1.4-3, 4, 7/98</li> </ul>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

45 CSR 2-3.1 and 13 – Opacity limit of 10% on a six minute block average (TV 4.1.1; R13-2498B 4.1.4)  
45 CSR 13 – The reboiler shall not exceed 1.47 MMBtu/hr (TV 4.1.2; R13-2839B 4.1.5)

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**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

45 CSR and 13 – Compliance with TV 4.1.1 is demonstrated by a Method 9, if required (TV 4.2.1; R13-2498B 4.2.1)

**Are you in compliance with all applicable requirements for this emission unit?** ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

## **Attachment G**

### Air Pollution Control Device Form

<b>ATTACHMENT G - Air Pollution Control Device Form</b>		
<b>Control device ID number:</b> FL02	<b>List all emission units associated with this control device.</b> DEHY02	
<b>Manufacturer:</b> Questor	<b>Model number:</b> Q100	<b>Installation date:</b> 2011
<b>Type of Air Pollution Control Device:</b>		
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"><input type="checkbox"/> Baghouse/Fabric Filter</div> <div style="width: 33%;"><input type="checkbox"/> Venturi Scrubber</div> <div style="width: 33%;"><input type="checkbox"/> Multiclone</div> <div style="width: 33%;"><input type="checkbox"/> Carbon Bed Adsorber</div> <div style="width: 33%;"><input type="checkbox"/> Packed Tower Scrubber</div> <div style="width: 33%;"><input type="checkbox"/> Single Cyclone</div> <div style="width: 33%;"><input type="checkbox"/> Carbon Drum(s)</div> <div style="width: 33%;"><input type="checkbox"/> Other Wet Scrubber</div> <div style="width: 33%;"><input type="checkbox"/> Cyclone Bank</div> <div style="width: 33%;"><input type="checkbox"/> Catalytic Incinerator</div> <div style="width: 33%;"><input type="checkbox"/> Condenser</div> <div style="width: 33%;"><input type="checkbox"/> Settling Chamber</div> <div style="width: 33%;"><input type="checkbox"/> Thermal Incinerator</div> <div style="width: 33%;"><input checked="" type="checkbox"/> Flare</div> <div style="width: 33%;"><input type="checkbox"/> Other (describe) _____</div> <div style="width: 33%;"><input type="checkbox"/> Wet Plate Electrostatic Precipitator</div> <div style="width: 33%;"><input type="checkbox"/> Dry Plate Electrostatic Precipitator</div> </div>		
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
VOC		99%
Benzene		99%
Ethylbenzene		99%
n-Hexane		99%
Toluene		99%
Xylene		99%
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b> QTI dehydration unit controlled flare 0.2 MMBtu/hr pilot burner		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>If Yes, Complete ATTACHMENT H</b> <b>If No, Provide justification.</b> The dehy unit (DEHY02) is not subject to CAM since it is subject to NESHAP Subpart HH, which has provisions for compliance monitoring established after 1990. Per 64.2(b)(1)(i), “ <i>emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act</i> ” are exempt from CAM. CAM was established to build in provisions for how compliance would be demonstrated for emission limits if not adequately covered by a NSPS or NESHAP rule.  In addition, for VOC purposes, the dehy unit is not subject to CAM per 64.2(b)(1)(vi), which states “ <i>emission limitations or standards for which a part 70 or 71 permit specified a continuous compliance determination method, as defined in 64.1</i> ” is exempt from CAM. Since the R13 permit for the facility (R13-2498B) specifies a “continuous compliance determination method” condition (e.g continuously monitoring the flare using a thermocouple to detect the presence of a flame) and that R13 condition was rolled into the Title V permit, CAM does not apply.		



**Describe the parameters monitored and/or methods used to indicate performance of this control device.**

45 CSR 6-4.1 and 13– Particulate Matter emission limit (TV 5.1.1; R13-2498B 4.1.14)  
45 CSR 6-4.3, 6-4.4, and 13 – Opacity limit of 20%, except smoke less than 40% opacity for a period(s) aggregating no more than 8 minutes per start-up (TV 5.1.2 and 5.1.14; R13-2498B 4.1.15 and 4.1.16)  
45 CSR 6-4.5 and 13 – Incinerator particles in the open air requirements (TV 5.1.3; R13-2498B 4.1.17)  
45 CSR 6-4.6 and 13 – Incinerator odor prevention requirements (TV 5.1.4; R13-2498B 4.1.18)  
45 CSR 10-4.1 – Sulfur Dioxide emission limit (TV 5.1.5; R13-2498B 4.1.19)  
45 CSR 10-5.1 – Hydrogen Sulfide emission limit (TV 5.1.6; R13-2498B 4.1.20)  
45 CSR 13 – The flare shall be operated with a 99% control efficiency (TV 5.1.8; R13-2498B 4.1.7)  
45 CSR 13 – No visible emissions except for periods not to exceed a total of 5 minutes during any 2 hour period (TV 5.1.9, R13-2498B 4.1.12)  
45 CSR 13 – The pilot flame shall be present at all times when emissions may be vented to it (TV 5.1.10, R13-2498B 4.1.8)  
45 CSR 13 – Operation and design of the flare (TV 5.1.11, 5.1.12, and 5.1.13; R13-2498B 4.1.10, 4.1.11, and 4.1.9)

**Monitoring**

45 CSR 13 – Monitor the presence or absence of the flare pilot flame using a thermocouple (TV 5.1.10 and 5.2.1; R13-2498B 4.1.8 and 4.2.2)  
45 CSR 13 – Conduct an initial Method 22 opacity test within one (1) year of permit issuance or initial startup of the flare, whichever is later (TV 5.2.2; R13-2498B 4.3.1)  
45 CSR 30-5.1.c – Monthly visual emission checks (TV 5.2.3)  
45 CSR 13 – Compliance with 5.1.5 shall be demonstrated by annual inlet wet gas sampling (TV 5.2.4; R13-2498B 4.3.4)  
45 CSR 13 – Compliance with 5.1.6 shall be demonstrated by annual inlet wet gas sampling (TV 5.2.5; R13-2498B 4.3.5)

**Recordkeeping**

45 CSR 30-5.1.c – Records of the monthly visual emission checks (TV 5.4.1)  
45 CSR 13 – Records of the times and duration of all periods which the pilot flame was absent (TV 5.4.2; R13-2498B 4.4.5)  
45 CSR 13 – Records of the flare design evaluation (TV 5.4.3, R13-2498B 4.4.6)  
45 CSR 13 – Records of the annual inlet wet gas sampling (TV 5.4.4; R13-2498B 4.4.8)  
45 CSR 13 – Records of initial Method 22 opacity test (TV 5.4.5; R13-2498B 4.4.9)

**Reporting**

45 CSR 13 – Reporting of violations/deviations of visible emissions requirements (TV 5.5.1, R13-2498B 4.5.2)  
45 CSR 13 – Reporting of any deviation from the flare design and operation criteria (TV 5.5.2; R13-2498B 4.5.3)