



January 29, 2016

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

9590 9401 0037 5168 3630 52

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  
Orma Compressor Station – R30-01300002-2011**

Dear Mr. Durham:

Enclosed please find the Title V Renewal Application for Dominion Transmission, Inc.'s (DTI) Orma Compressor Station, Permit No. R30-01300002-2011. 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 Orma Station:

- Equipment removed from the facility
  - TK02 – 3,740 gal Horizontal Aboveground Storage Tank (Drip Gas)
  - TK04 – 2,730 gal Vertical Aboveground Storage Tank (Lube Oil)
  - TK05 – 4,200 gal Vertical Aboveground Storage Tank (Lube Oil)
  - TK06 – 550 gal Horizontal Aboveground Storage Tank (Used Oil)
- Equipment added to the facility:
  - TK08 – 4,000 gal Horizontal Aboveground Storage Tank (Produced Fluids)
  - TK09 – 1,000 gal Vertical Aboveground Storage Tank (Used Oil)
  - TK11 – 6,000 gal Vertical Aboveground Storage Tank (Lube Oil)
  - TK12 – 1,000 gal Vertical Aboveground Storage Tank (Triethylene Glycol)
  - TK13 – 230 gal Horizontal Aboveground Storage Tank (Ice Chek)

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

- CAM Applicability

We request that all CAM conditions be removed from the Title V permit as CAM does not apply. 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), "*emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act*" 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 "*emission limitations or standards for which a part 70 or 71 permit specified a continuous compliance determination method, as defined in 64.1*" is exempt from CAM. Since the R13 permit for the facility (R13-2945A) 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.

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,



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Amanda B. Tornabene  
Director, Gas Environmental Services

**ORMA COMPRESSOR STATION  
DOMINION TRANSMISSION INC.  
APPLICATION FOR TITLE V OPERATING PERMIT RENEWAL  
TITLE V OPERATING PERMIT NO: R30-01300002-2011**

**Dominion Transmission, Inc.**  
Orma Compressor Station  
Crooked Run Road  
Orma, WV 25268

**JANUARY 2016**

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

**TITLE V PERMIT RENEWAL APPLICATION**

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Attachment D: Title V Equipment Table

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Attachment G: Air Pollution Control Device Form

Attachment H: Compliance Assurance Monitoring (CAM) Form

**\*\*Note:** Attachment F is not included in this application.

**TITLE V PERMIT APPLICATION CHECKLIST FOR ADMINISTRATIVE  
COMPLETENESS**

<b>Requirement</b>	<b>Application</b>
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
General Application Forms signed by a Responsible Official	Enclosed – Section 2
Confidential Information submitted in accordance with 45CSR31	Not Applicable

# **SECTION 1**

Introduction

## **INTRODUCTION:**

Orma Station is a natural gas compressor station used to compress natural gas for Dominion Transmission, Inc.'s transmission pipeline system in West Virginia. Orma Station is located in Orma, WV.

Orma Station has the potential to emit in excess of 100 tons per year of nitrogen oxides (NO<sub>x</sub>). The station is classified as a major stationary source under the 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. Orma Station is also 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.

Orma Station was originally issued a Title V Operating Permit (Permit No: R30-01300002-2006) in 2006 for a period of five (5) years, with an expiration date of May 16, 2011. Orma Station is also subject to the underlying State Operating Permit (Rule 13 Permit No: R13-2945A). The Title V operating permit is for the operation of two (2) 660 hp natural gas fired reciprocating engines (EN01 and EN02), one (1) 9 MMscf/day glycol dehydrator system (DEHY02) with flare (F1), one (1) 0.567 MMBtu/hr dehydration unit reboiler (RBR02), one (1) 112.2 hp natural gas fired emergency generator (EG01), and eight (8) above ground storage tanks of various sizes (TK01, TK03, TK07-TK09, TK11-TK13).

The last Title V renewal application was submitted in 2010, with the Title V Operating Permit Renewal being issued on August 8, 2011, with an expiration date of August 8, 2016.

## **PROCESS DESCRIPTION**

Orma Station is a compressor facility that services a natural gas pipeline system. The compressor engines (EN01 and EN02) at the facility receive natural gas flowing through a valve on the pipeline and recompresses the natural gas in order to further transport the natural gas through the pipeline system. 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 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 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 enclosed flare (F1) to combust the hydrocarbons; thereby, reducing overall emissions and odor. The flare is permitted with a destruction efficiency of 95% for VOCs and volatile HAPs. The compressed, dehydrated gas then enters the pipeline.

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

Two (2) 660 hp Cooper GMXE-8 natural gas-fired reciprocating engines/integral compressors

- Emission unit ID: EN01 and EN02
- Emission point ID: EN01 and EN02

One (1) 112.2 hp natural gas-fired emergency generator

- Emission unit ID: EG01
- Emission point ID: EG01

One (1) 0.567 MMBtu/hr natural gas-fired dehydration unit reboiler

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

One (1) 9 MMscf/day dehydration unit/still column

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

One (1) 4.0 MMBtu/hr dehydration unit flare

- Emission unit ID: F1
- Emission point ID: F1

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

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

One (1) 2,100 gallon vertical aboveground ethylene glycol storage tank

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

One (1) 500 gallon vertical aboveground wastewater storage tank

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

One (1) 4,000 gallon horizontal aboveground produced fluids storage tank

- Emission unit ID: TK08
- Emission point ID: TK08

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

- Emission unit ID: TK09
- Emission point ID: TK09

One (1) 6,000 gallon vertical aboveground lube oil storage tank

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

One (1) 1,000 gallon vertical aboveground triethylene glycol storage tank

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

One (1) 230 gallon horizontal aboveground ice chek storage tank

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

## **SECTION 2**

Title V Renewal Permit Application -  
General Forms



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475

www.dep.wv.gov/daq

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

Form with 10 sections: 1. Name of Applicant (As registered with the WV Secretary of State's Office): Dominion Transmission, Inc. 2. Facility Name or Location: Orma Station 3. DAQ Plant ID No.: 0 1 3 — 0 0 0 0 2 4. Federal Employer ID No. (FEIN): 5 5 0 6 2 9 2 0 3 5. Permit Application Type: [X] Permit Renewal When did operations commence? 1965 What is the expiration date of the existing permit? 08/08/2016 6. Type of Business Entity: [X] Corporation [ ] Governmental Agency [ ] LLC [ ] Partnership [ ] Limited Partnership 7. Is the Applicant the: [ ] Owner [ ] Operator [X] Both 8. Number of onsite employees: 0 9. Governmental Code: [X] Privately owned and operated; 0 [ ] County government owned and operated; 3 [ ] Federally owned and operated; 1 [ ] Municipality government owned and operated; 4 [ ] State government owned and operated; 2 [ ] District government owned and operated; 5 10. Business Confidentiality Claims Does this application include confidential information (per 45CSR31)? [ ] Yes [X] No

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

<b>12. Facility Location</b>			
Street: Crooked Run Road	City: Orma	County: Calhoun County	
UTM Easting: 492.68 km	UTM Northing: 4288.86 km	Zone: <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18	
<b>Directions:</b> From intersection of Rt. 33/Rt. 119 West & Rt. 16 South at Arnoldsburg take Rt. 16 South 4.7 miles to Orma, turn left onto Euclid/Nicut Road and travel 1.0 mile, turn left onto Crooked Run Road and go 0.1 mile, station is on left.			
Portable Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Is facility located within a nonattainment area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes, for what air pollutants?	
Is facility located within 50 miles of another state? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		If yes, name the affected state(s). Ohio	
Is facility located within 100 km of a Class I Area <sup>1</sup> ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes, name the area(s).	
If no, do emissions impact a Class I Area <sup>1</sup> ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
<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.**

Orma Station is a compressor facility that services a natural gas pipeline system. The purpose of the facility is to recompress natural gas flowing through a pipeline for transportation. The reciprocating engines (EN01 and EN02) at the facility receives natural gas from a valve on a pipeline and compress it to enable further transportation in the pipeline.

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 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/Reqts.	<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>
<p><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.</b></p> <p>40 CFR Subpart JJJJ – The compressor engines (EN01 and EN02) are not subject to this subpart since they were manufactured in 1965, before the applicability date.</p> <p>40 CFR 60 Subpart OOOO – This subpart does not apply to the facility since the facility is a gathering facility that 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).</p> <p>40 CFR 63 Subpart HHH – This subpart does not apply to the facility since the facility is not a transmission or storage station and is not a major source of HAPs.</p> <p>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.</p> <p>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”.</p> <p>40 CFR 64 – The dehy unit (DEHY02) is not applicable to CAM since the unit is subject to NESHAP Subpart HH, which has provisions for compliance monitoring established after 1990 (exemption per 64.2(b)(1)(i)). In addition, since the R13-2945A 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)).</p>
<input type="checkbox"/> 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 34 – Asbestos inspection and removal (TV 3.1.3)  
State Only: 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 emissions inventory (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 3.1.11)

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 34 – Prior to demolition/construction buildings will be inspected for asbestos (TV 3.1.3)  
45 CSR 4 – Permittee shall maintain records of all odor complaints received (TV 3.1.4)  
45 CSR 11 – Upon request by the Secretary, the permittee shall prepare a standby plan (TV 3.1.5)  
WV 22-5-4 – The permittee shall submit annual emission inventory reports (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 17-3 – The permittee will limit fugitive emissions from the facility by burning only pipeline quality natural gas (TV 3.1.11)  
45 CSR 13 – Compliance with all annual limits shall be based on a rolling 12-month total (TV 3.2.3; R13-2945A 3. 45 CSR 13 and WV Code 22-5-4(a)(14 - 15) – Testing requirements (TV 3.3.1 and 3.3.2)  
45 CSR 30 – Recordkeeping Requirements (TV 3.4)  
45 CSR 30 – Reporting Requirements (TV 3.5)  
45 CSR 30 - The permittee shall submit a certified emissions statement and pay fees annually (TV 3.5.4)  
45 CSR 30 - 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.

**21. Active Permits/Consent Orders**

Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit ( <i>if any</i> )
R13-2945A	10/17/2012	N/A

**22. Inactive Permits/Obsolete Permit Conditions**

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)	42.46
Nitrogen Oxides (NO <sub>x</sub> )	259.69
Lead (Pb)	N/A
Particulate Matter (PM <sub>2.5</sub> ) <sup>1</sup>	1.83
Particulate Matter (PM <sub>10</sub> ) <sup>1</sup>	1.83
Total Particulate Matter (TSP)	2.31
Sulfur Dioxide (SO <sub>2</sub> )	0.03
Volatile Organic Compounds (VOC)	40.97
Hazardous Air Pollutants <sup>2</sup>	Potential Emissions
Acetaldehyde	0.37
Acrolein	0.37
Benzene	0.21
Ethylbenzene	0.09
Formaldehyde	2.62
Hexane	0.07
Toluene	0.44
Xylene	1.06
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 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 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"/>	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.  Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:  _____  _____  _____  _____  _____

<b>24. Insignificant Activities (Check all that apply)</b>	
<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>
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input 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 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.

<b>24. Insignificant Activities (Check all that apply)</b>	
<input type="checkbox"/>	40. Ozone generators.
<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 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: 

Signature Date: 01/20/16

(Must be signed and dated in blue ink)

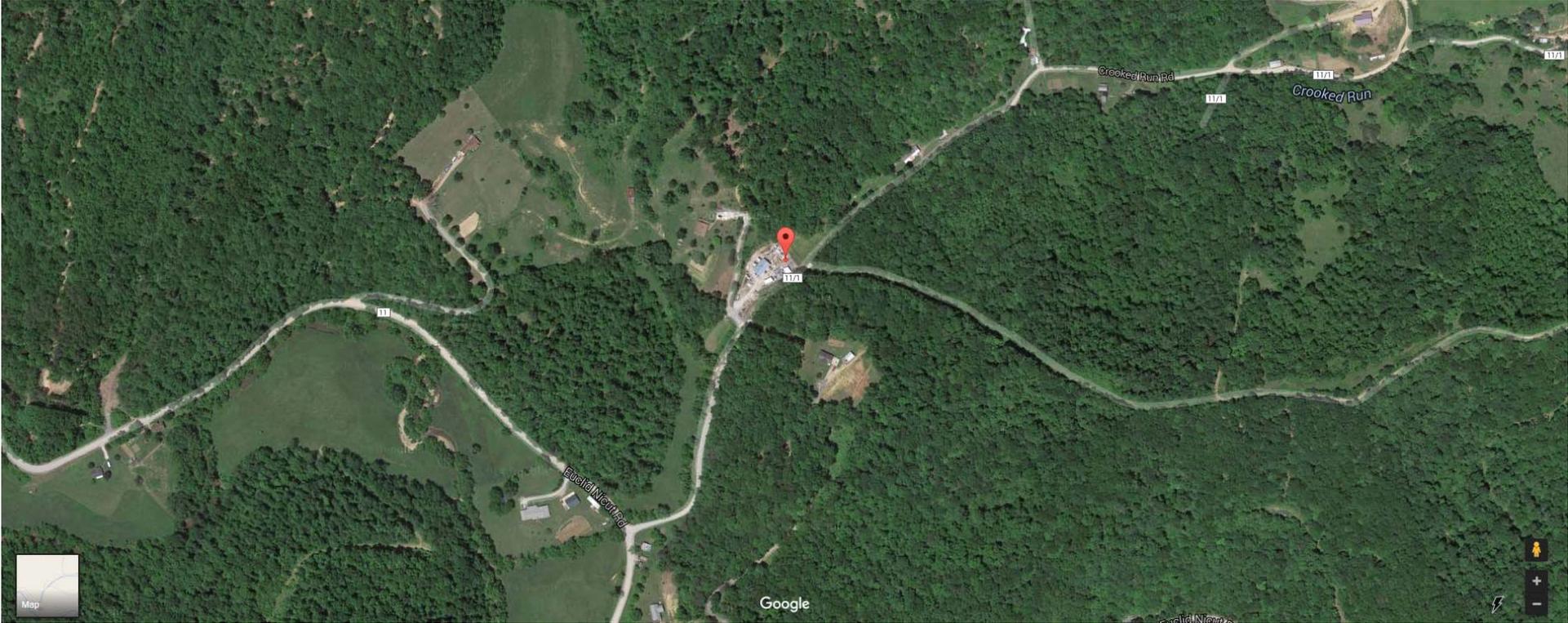
**Note: Please check all applicable attachments included with this permit application:**

<input checked="" type="checkbox"/>	ATTACHMENT A: Area Map
<input checked="" type="checkbox"/>	ATTACHMENT B: Plot Plan(s)
<input checked="" type="checkbox"/>	ATTACHMENT C: Process Flow Diagram(s)
<input checked="" type="checkbox"/>	ATTACHMENT D: Equipment Table
<input checked="" type="checkbox"/>	ATTACHMENT E: Emission Unit Form(s)
<input type="checkbox"/>	ATTACHMENT F: Schedule of Compliance Form(s)
<input checked="" type="checkbox"/>	ATTACHMENT G: Air Pollution Control Device Form(s)
<input checked="" type="checkbox"/>	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

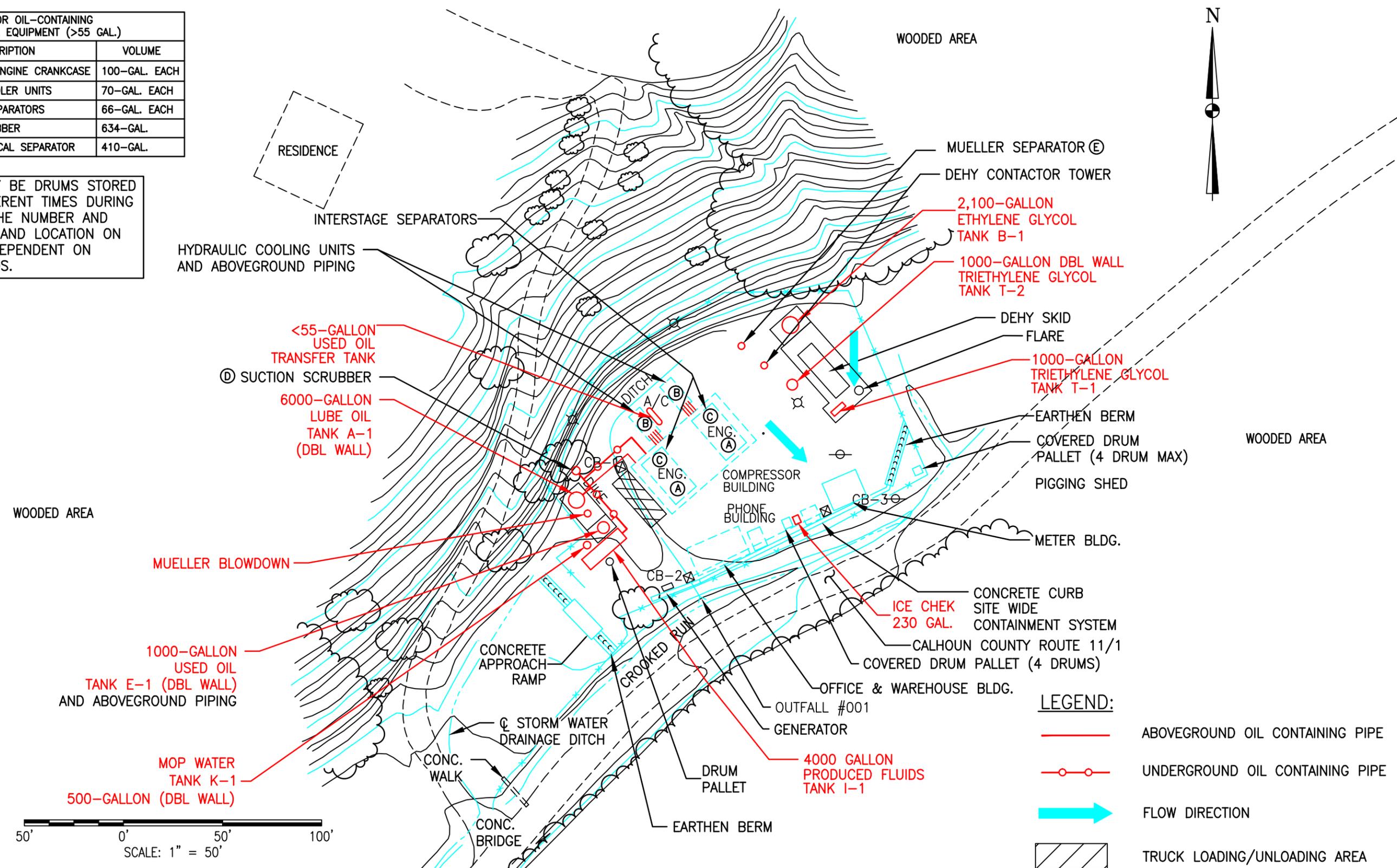


## **Attachment B**

Plot Plan

MAJOR OIL-CONTAINING MECHANICAL EQUIPMENT (>55 GAL.)		
ITEM	DESCRIPTION	VOLUME
A	COMPRESSOR ENGINE CRANKCASE	100-GAL. EACH
B	HYDRAULIC COOLER UNITS	70-GAL. EACH
C	INTERSTAGE SEPARATORS	66-GAL. EACH
D	SUCTION SCRUBBER	634-GAL.
E	MUELLER VERTICAL SEPARATOR	410-GAL.

NOTE: THERE MAY BE DRUMS STORED ON SITE AT DIFFERENT TIMES DURING THE YEAR AND THE NUMBER AND TYPE OF DRUMS AND LOCATION ON SITE CAN VARY DEPENDENT ON OPERATIONAL NEEDS.

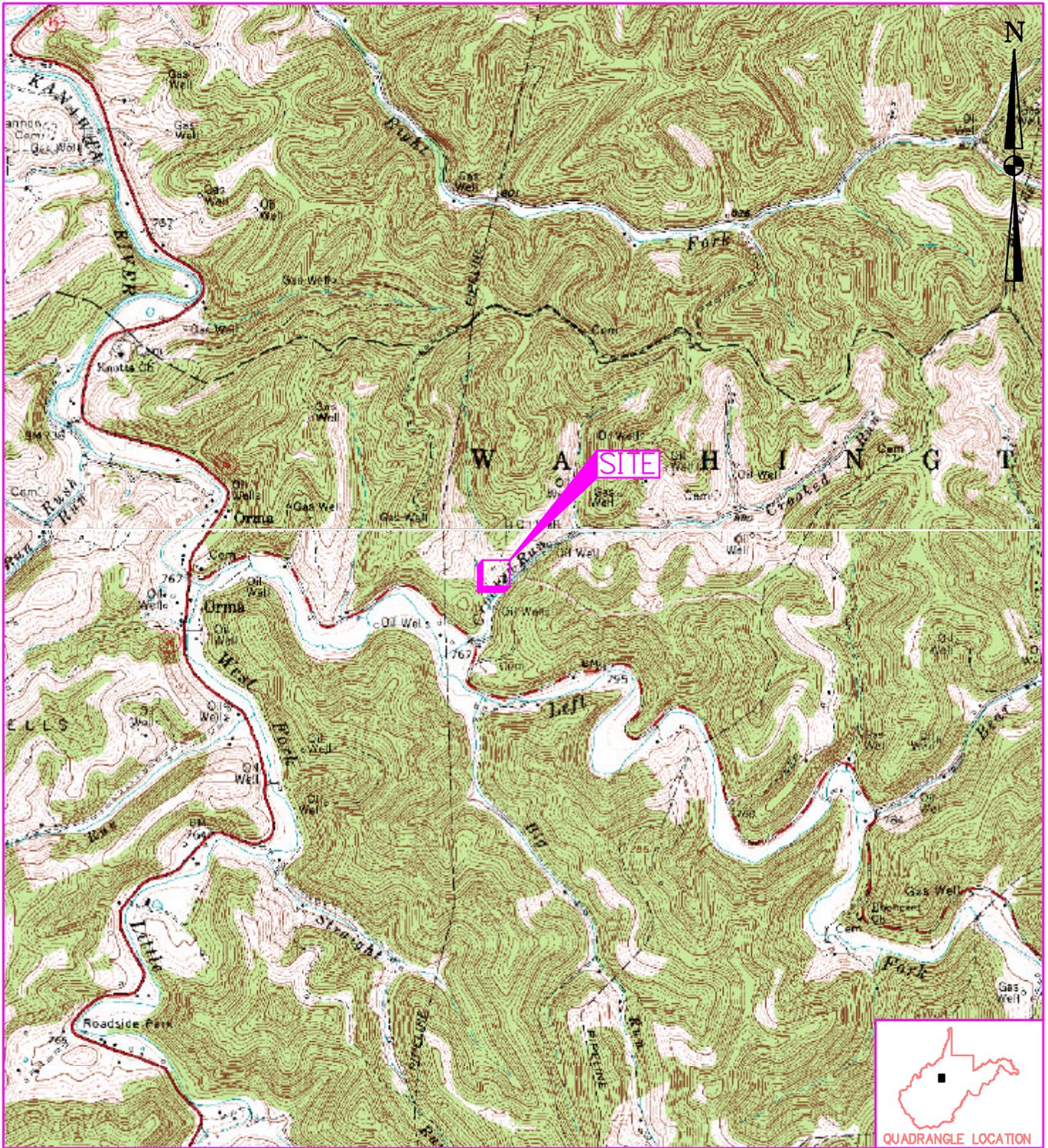


**LEGEND:**

- ABOVEGROUND OIL CONTAINING PIPE
- UNDERGROUND OIL CONTAINING PIPE
- ➔ FLOW DIRECTION
- TRUCK LOADING/UNLOADING AREA

SYM.	DATE	BY	REVISION DESCRIPTION	PRJ/TSK	APP.	SCALE	DATE
7	09/22/15	TBB	REMOVE "OUT OF SERVICE" LUBE OIL TANK, RELOCATE MUELLER BLOWDOWN, & ADD UG PIPE			1" = 50'	
6	05/11/15	TBB	MOVED TANKS A-1, I-1, & K-1; REMOVED TANKS A-2 & I-2				
5	11/07/14	TBB	SCALED, ADDED BAR SCALE, & ADDED ADJACENT PROPERTIES				
4	10/09/13	TBB	PER TIM JACKSONS MARK UPS				
3	08/13/13	MPR	PER TIM JACKSONS MARK UPS				

<b>Dominion Transmission, Inc.</b>				
445 West Main St. Clarksburg, West Virginia 26301 / Phone: (304) 623-8000				
FOR:		<b>ORMA COMPRESSOR STATION</b>		
TITLE:		<b>ENVIRONMENTAL EMERGENCY SITE PLAN</b>		
DIR:	DOCUMENTUM	GROUP	DWG. NO.	REV.
FILE:	PRJ/TSK:	PD	X9777	7



REFERENCE: USGS 7.5' QUADRANGLE MAP OF: MILLSTONE, WEST VIRGINIA; DATED 1965 AND  
 CHLOE, WEST VIRGINIA; DATED 1966, PHOTOREVISED 1975.

DRAWN BY	DJF
DATE	
CHECKED BY	
SET JOB NO.	205032-06
SET DWG FILE	ORMAm01.dwg
DRAWING SCALE	1"=2000'



98 Vanadium Road Bridgeville, PA 15017 (412) 221-1100

**DOMINION TRANSMISSION**  
 ORMA COMPRESSOR STATION  
 ORMA, CALHOUN COUNTY, WEST VIRGINIA  
 SITE LOCATION MAP

DRAWING NO.	FIGURE 1	REV.	0
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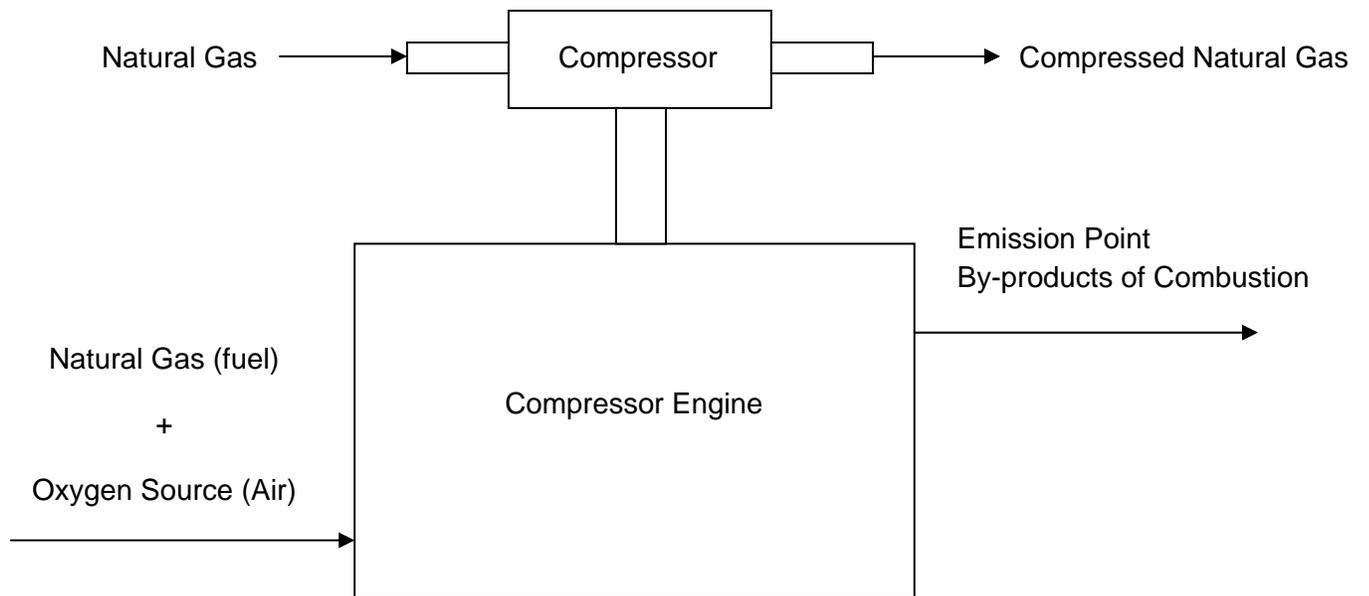
## **Attachment C**

### Process Flow Diagrams

**Dominion Transmission, Inc.**

**Orma Compressor Station**

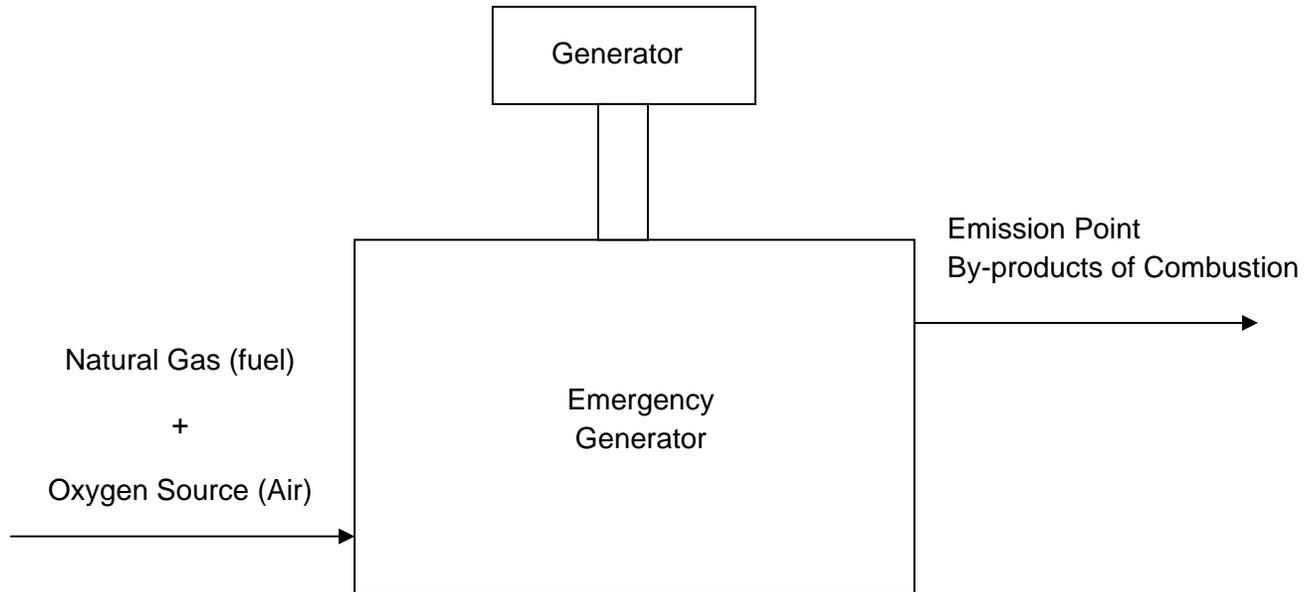
**Compressor Engines (EN01 and EN02) Process Flow Diagram**



**Dominion Transmission, Inc.**

**Orma Compressor Station**

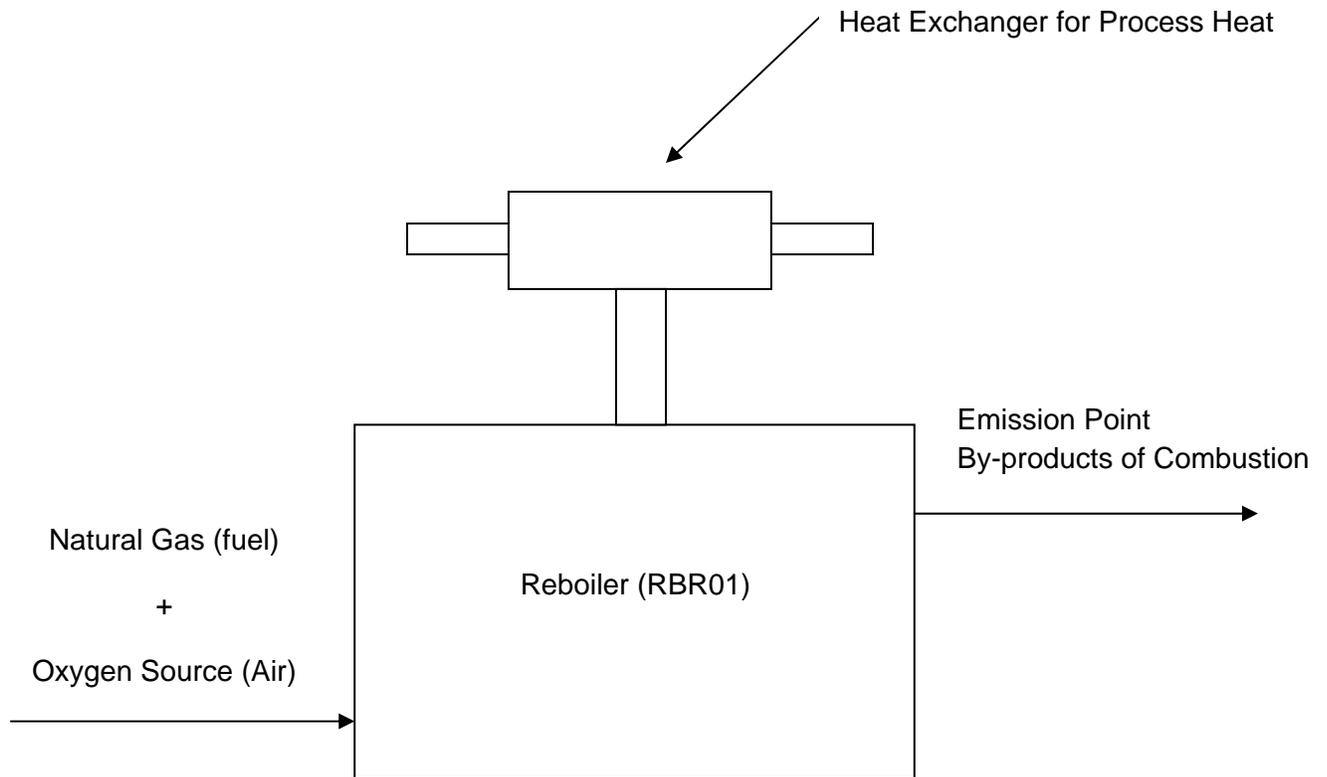
**Emergency Generator (EG01) Process Flow Diagram**



**Dominion Transmission, Inc.**

**Orma Compressor Station**

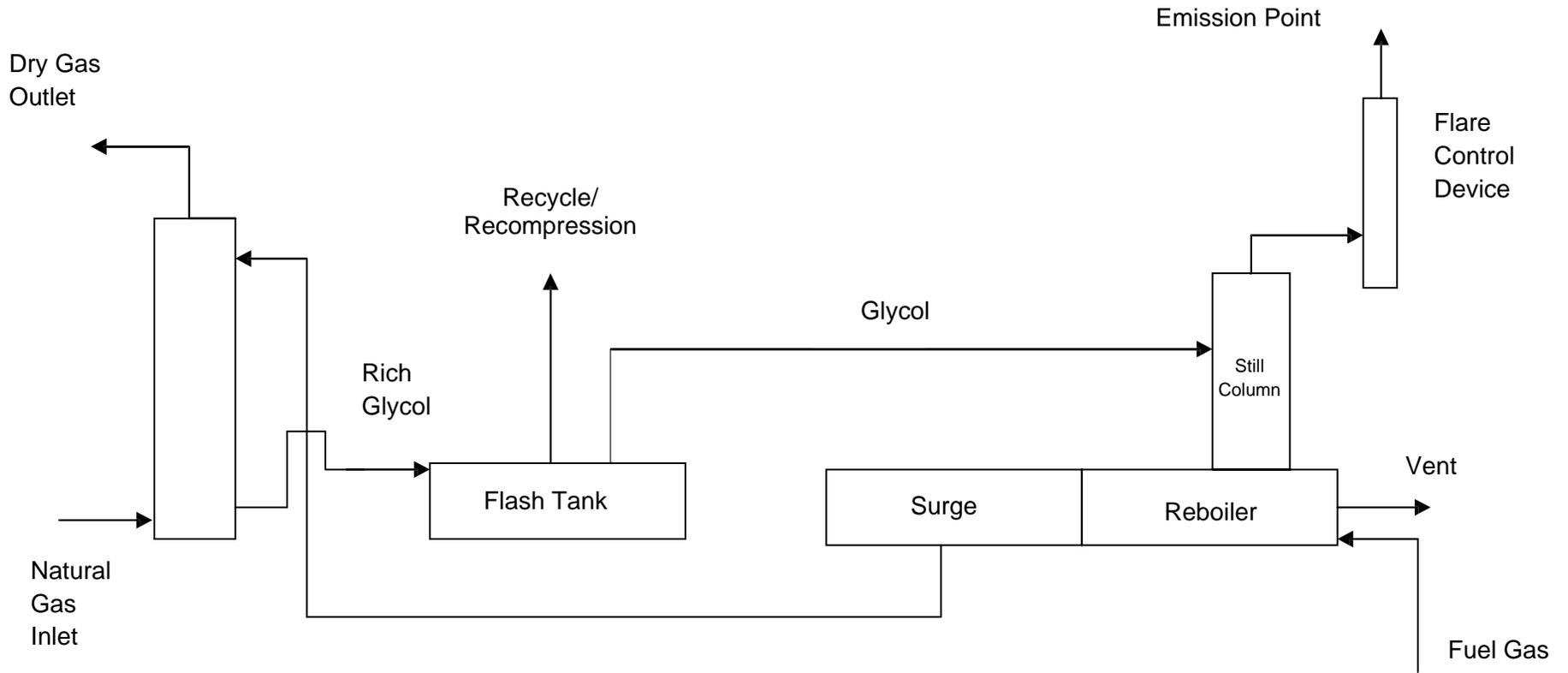
**Reboiler (RBR02) Process Flow Diagram**



**Dominion Transmission, Inc.**

**Orma Compressor Station**

**Dehydration Unit (DEHY02, F1, 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 GMXE-8	660 hp	1965
EN02	N/A	EN02	Reciprocating Engine/Integral Compressor; Cooper GMXE-8	660 hp	1965
EG01	N/A	EG01	4-Stroke, Rich-Burn Natural Gas-Fired Cummins 75GGHF Auxiliary Generator	112.2 hp	2012
DEHY02	F1	DEHY02	Cameron Model 210/350 Glycol Dehydrator Regeneration Still Column	9 MMscf/day	2012
RBR02	none	RBR02	Cameron Model 210/350 Glycol Dehydrator Regeneration Reboiler	0.567 MMBtu/hr	2012
F1	N/A	F1	Dehydration Unit Flare	4.0 MMBtu/hr	2012
TK01	N/A	TK01	Horizontal Aboveground Tank Containing Tri- Ethylene Glycol	1,000 Gallons	1983
TK03	N/A	TK03	Vertical Aboveground Tank Containing Ethylene Glycol	2,100 Gallons	1990
TK07	N/A	TK07	Vertical Aboveground Tank Containing Wastewater	500 Gallons	2003
New units (updates) to equipment list:					
TK08	N/A	TK08	Horizontal Aboveground Tank Containing Produced Fluids	4,000 Gallons	2015
TK09	N/A	TK09	Vertical Aboveground Tank Containing Used Oil	1,000 Gallons	2013
TK11	N/A	TK11	Vertical Aboveground Tank Containing Lube Oil	6,000 Gallons	2015
TK12	N/A	TK12	Vertical Aboveground Tank Containing Triethylene Glycol	1,000 Gallons	2013
TK13	N/A	TK13	Horizontal Aboveground Tank Containing Ice Chek	230 Gallons	2009
Units that have been removed:					
TK02	N/A	TK02	Horizontal Aboveground Tank Containing Drip Gas	3,740 Gallons	1982
TK04	N/A	TK04	Vertical Aboveground Tank Containing Lube Oil	2,730 Gallons	1965
TK05	N/A	TK05	Vertical Aboveground Tank Containing Lube Oil	4,200 Gallons	1965
TK06	N/A	TK06	Horizontal Aboveground Tank Containing Used Oil	550 Gallons	2003

<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> DEHY02	<b>Emission unit name:</b> DEHY02 Dehydration Unit	<b>List any control devices associated with this emission unit:</b> F1
---	--	---

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

Dehydration unit regeneration still column

<b>Manufacturer:</b> Cameron	<b>Model number:</b> 210/350	<b>Serial number:</b>
<b>Construction date:</b> 2012	<b>Installation date:</b> 2012	<b>Modification date(s):</b> N/A

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

9 MMscf /day

<b>Maximum Hourly Throughput:</b> 9 MMscf /day	<b>Maximum Annual Throughput:</b> 3,285 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> ___ Yes <input checked="" type="checkbox"/> No	<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired
---	--

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

**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 wet gas usage = 9 MMscf/day
  - Maximum annual wet gas usage = 3,285 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><i>Emissions Data</i></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)	1.78	7.81
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.03	0.12
Ethylbenzene	0.02	0.08
n-Hexane	0.01	0.05
Toluene	0.09	0.39
Xylenes	0.24	1.04
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>- Emission point is F1, but emissions provided include only dehydration process emissions, DEHY01. (Flare pilot fuel combustion emissions are in Attachment E – F1)</li> <li>- VOC and HAP emission rates estimated from GRI-GLYCalc v4.0, with a 95% destruction efficiency of the flare.</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.

- 63.10(b)(3) – Shall be an area source of HAPs (below 10/25 tons/yr) (TV 4.1.6)
- 63.760(f) – NESHAP Subpart HH applicability (TV 4.1.7)
- 63.764(e) – NESHAP Subpart HH benzene exemption requirements (TV 4.1.7 and 4.1.8)
- 45 CSR 13 – The maximum wet natural gas throughput shall not exceed 9 MMscf/day or 3,285 MMscf/yr (TV 4.1.9; R13-2945A 4.1.2)
- 45 CSR 13 – Maximum emission limits (TV 4.1.10; R13-2945A 4.1.3)

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.)

- 45 CSR 30-5.1.c – Compliance with area source status and benzene exemption will be demonstrated by using GLYCalc, using and recording actual operating parameters; maintain records (TV 4.2.1 and 4.48)
- 45 CSR 13 – Monitor and maintain monthly and rolling 12-month records of the wet gas throughput (TV 4.2.3 and 4.4.8; R13-2945A 4.2.3)
- 45 CSR 30-5.1.c – Within the last 2 years of the permit term, take a wet gas sample (TV 4.3.1)
- 63.772(b)(2)(i) – NESHAP Subpart HH determination of benzene emissions by using GLYCalc (TV 4.3.2)
- 45 CSR 30-5-1.c and 63.774(d)(1)(ii) – Calculate and maintain a record of actual uncontrolled emissions based on the daily annual average throughput processed by the dehydration unit (TV 4.4.2)
- 45 CSR 30-5-1 – By March 31<sup>st</sup> of the following year of the wet gas sample, submit an emission summary for the dehydration unit using the new wet gas sample (TV 4.5.2)

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> EG01	<b>Emission unit name:</b> EG01 Emergency Generator	<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 emergency auxiliary generator

<b>Manufacturer:</b> Cummins	<b>Model number:</b> 75GGHF	<b>Serial number:</b> F120356938
---------------------------------	--------------------------------	-------------------------------------

<b>Construction date:</b> 6/2012	<b>Installation date:</b> 2013	<b>Modification date(s):</b> N/A
-------------------------------------	-----------------------------------	-------------------------------------

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

<b>Maximum Hourly Throughput:</b> 987 scf/hr	<b>Maximum Annual Throughput:</b> 0.49 MMscf/yr	<b>Maximum Operating Schedule:</b> 500 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> 112.2 hp	<b>Type and Btu/hr rating of burners:</b> 0.99 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.**

- Natural gas
- Maximum hourly fuel usage = 987 scf/hr
  - Maximum annual fuel usage = 0.49 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><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	11.47	2.87
Nitrogen Oxides (NO <sub>x</sub> )	1.53	0.38
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)	0.02	0.01
Sulfur Dioxide (SO <sub>2</sub> )	< 0.01	< 0.01
Volatile Organic Compounds (VOC)	0.30	0.07
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	< 0.01	< 0.01
Acrolein	< 0.01	< 0.01
Benzene	< 0.01	< 0.01
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.02	0.01
Toluene	< 0.01	< 0.01
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 were based on manufacturer's specifications.</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 3.2-3.</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 13 – The emergency generator shall be 112.2 hp and not operate in excess of 500 hrs/yr (TV 6.1.1; R13-2945A 4.1.1.a)
- 45 CSR 13 – Emission limits (TV 6.1.2; R13-2945A 4.1.1.b)
- 40 CFR Part 60 Subpart JJJJ – NSPS emission limits (TV 6.1.3; R13-2945A 4.1.1.c)
- 40 CFR Part 60 Subpart JJJJ – NSPS emergency definition; limitation on maintenance and readiness testing to 100 hrs/yr (TV 6.1.4 and 6.2.2; R13-2945A 4.1.1.d and 4.2.2)
- 40 CFR Part 60 Subpart JJJJ – NSPS general requirements/provisions (TV 6.1.5)
- 40 CFR Part 63 Subpart ZZZZ – RICE NESHAP as a new, emergency, spark ignition engine at an area source. Compliance with NSPS Subpart JJJJ shows compliance with NESHAP Subpart ZZZZ (TV 6.1.6)

\_\_\_\_ 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.)

- 45 CSR 13 – Record hours of operation on a monthly and rolling 12 month basis (TV 6.2.1; R13-2945A 4.2.1)
- 40 CFR Part 60 Subpart JJJJ – Purchase a certified engine and operate according to manufacturer’s written instructions to meet NSPS emission limits. Keep records of conducted maintenance (TV 6.2.2; R13-2945A 4.2.2)
- 40 CFR Part 60 Subpart JJJJ – Install non-resettable hour meter to demonstrate compliance (TV 6.2.3)
- 40 CFR Part 60 Subpart JJJJ – Comply with all applicable testing requirements (TV 6.3.2; R13-2945A 4.3.5)
- 40 CFR Part 60 Subpart JJJJ – Comply with all applicable recordkeeping requirements (TV 6.4.1 and 6.4.2; R13-2945A 4.4.9)
- 40 CFR Part 60 Subpart JJJJ – Comply with all applicable reporting requirements (TV 6.5.1; R13-2945A 4.5.4)

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
---	--	--

**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> GMXE-8	<b>Serial number:</b> 46322
--------------------------------	--------------------------------	--------------------------------

<b>Construction date:</b>	<b>Installation date:</b> 1965	<b>Modification date(s):</b> N/A
---------------------------	-----------------------------------	-------------------------------------

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

<b>Maximum Hourly Throughput:</b> 0.0054 MMscf/hr	<b>Maximum Annual Throughput:</b> 47.4 MMscf/yr	<b>Maximum Operating Schedule:</b> 8,760 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> 660 hp	<b>Type and Btu/hr rating of burners:</b> 8,200 Btu/hp-hr 0.0054 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 = 0.0054 MMscf/hr
  - Maximum annual fuel usage = 47.4 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/scf

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	4.37	19.12
Nitrogen Oxides (NO <sub>x</sub> )	29.54	129.37
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.21	0.91
Particulate Matter (PM <sub>10</sub> )	0.21	0.91
Total Particulate Matter (TSP)	0.26	1.15
Sulfur Dioxide (SO <sub>2</sub> )	< 0.01	0.01
Volatile Organic Compounds (VOC)	3.35	14.66
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.04	0.18
Acrolein	0.04	0.18
Benzene	0.01	0.05
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.30	1.31
Hexane	< 0.01	0.01
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 specifications.</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.</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 5.1.1)
- 40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions (TV 5.1.2, 5.1.3, and 5.1.5)
- 40 CFR Part 63 Subpart ZZZZ – NESHAP continuous compliance requirements (TV 5.1.4)

\_\_\_\_ 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 4,320 hours of operation or annually, whichever comes first, or utilize an oil analysis program (TV 5.1.1 and 5.2.1.c)
- 40 CFR Part 63 Subpart ZZZZ – Comply with all applicable general requirements/provisions (TV 5.1.2, 5.1.3, and 5.1.5)
- 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 5.1.4)
- 40 CFR Part 63 Subpart ZZZZ – Minimize the engine’s time spent at idle during startup (TV 5.2.1.b)
- 40 CFR Part 63 Subpart ZZZZ – Comply with all applicable recordkeeping and reporting requirements (TV 5.4.1, 5.4.3, and 5.5.1)
- 40 CFR Part 63 Subpart ZZZZ – Keep records of maintenance conducted on the RICE (TV 5.4.2)

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> GMXE-8	<b>Serial number:</b> 46321
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<b>Construction date:</b>	<b>Installation date:</b> 1965	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
660 hp

<b>Maximum Hourly Throughput:</b> 0.0054 MMscf/hr	<b>Maximum Annual Throughput:</b> 47.4 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> 660 hp	<b>Type and Btu/hr rating of burners:</b> 8,200 Btu/hp-hr 0.0054 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 = 0.0054 MMscf/hr
  - Maximum annual fuel usage = 47.4 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/scf

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	4.37	19.12
Nitrogen Oxides (NO <sub>x</sub> )	29.54	129.37
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.21	0.91
Particulate Matter (PM <sub>10</sub> )	0.21	0.91
Total Particulate Matter (TSP)	0.26	1.15
Sulfur Dioxide (SO <sub>2</sub> )	< 0.01	0.01
Volatile Organic Compounds (VOC)	3.35	14.66
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.04	0.18
Acrolein	0.04	0.18
Benzene	0.01	0.05
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.30	1.31
Hexane	< 0.01	0.01
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 specifications.</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.</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 5.1.1)
- 40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions (TV 5.1.2, 5.1.3, and 5.1.5)
- 40 CFR Part 63 Subpart ZZZZ – NESHAP continuous compliance requirements (TV 5.1.4)

\_\_\_\_ 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 4,320 hours of operation or annually, whichever comes first, or utilize an oil analysis program (TV 5.1.1 and 5.2.1.c)
- 40 CFR Part 63 Subpart ZZZZ – Comply with all applicable general requirements/provisions (TV 5.1.2, 5.1.3, and 5.1.5)
- 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 5.1.4)
- 40 CFR Part 63 Subpart ZZZZ – Minimize the engine’s time spent at idle during startup (TV 5.2.1.b)
- 40 CFR Part 63 Subpart ZZZZ – Comply with all applicable recordkeeping and reporting requirements (TV 5.4.1, 5.4.3, and 5.5.1)
- 40 CFR Part 63 Subpart ZZZZ – Keep records of maintenance conducted on the RICE (TV 5.4.2)

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> F1	<b>Emission unit name:</b> F1 Dehydration Unit 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 (QTI)	<b>Model number:</b> E/35	<b>Serial number:</b> Q1001096
<b>Construction date:</b> 2012	<b>Installation date:</b> 2013	<b>Modification date(s):</b> N/A

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

Combustor rating = 4.0 MMBtu/hr  
Pilot rating = 0.60 MMBtu/hr

<b>Maximum Hourly Throughput:</b> Supplemental and pilot natural gas 338 scf/hr	<b>Maximum Annual Throughput:</b> Supplemental and pilot natural gas 2.96 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 rating = 0.60 MMBtu/hr	<b>Type and Btu/hr rating of burners:</b> Combustor rating = 4.0 MMBtu/hr Pilot rating = 0.60 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 throughput (supplemental and pilot natural gas) = 338 scf/hr
  - Maximum annual fuel throughput (supplemental and pilot natural gas) = 2.96 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><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.27	1.17
Nitrogen Oxides (NO <sub>x</sub> )	0.07	0.34
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>- CO emission factor from Dominion Spec Sheet, 2/20/12</li> <li>- NO<sub>x</sub> emission factors from AP-42 Section 13.5 for Waste Gas (9/91) and Section 1.4 for Natural Gas (7/98)</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.

\_\_\_ 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.)

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 Dehydration Unit 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.):**

A natural gas fired boiler used to reheat glycol within the dehydration unit.

<b>Manufacturer:</b> Cameron	<b>Model number:</b> 210/350	<b>Serial number:</b> A14312001383801
<b>Construction date:</b> 2012	<b>Installation date:</b> 2012	<b>Modification date(s):</b> N/A

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

<b>Maximum Hourly Throughput:</b> 435 scf/hr	<b>Maximum Annual Throughput:</b> 3.81 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> 0.567 MMBtu/hr	<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 hourly fuel usage = 435 scf/hr
  - Maximum annual fuel usage = 3.81 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><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.04	0.18
Nitrogen Oxides (NO <sub>x</sub> )	0.05	0.22
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	0.01
Sulfur Dioxide (SO <sub>2</sub> )	< 0.01	< 0.01
Volatile Organic Compounds (VOC)	0.04	0.17
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	< 0.01	< 0.01
Formaldehyde	< 0.01	< 0.01
n-Hexane	< 0.01	< 0.01
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>, CO, and VOC emission factors from Dominion Spec Sheet, 2/20/12</li> <li>- PM, PM10, PM2.5, and SO2 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 13 and 45 CSR 2-3.1 – Opacity limit of 10% (TV 4.1.1; R13-2945A 4.1.4.d)  
45 CSR 13 – The reboiler shall be rated at 0.567 MMBtu/hr and shall only be fired by natural gas (TV 4.1.11; R13-2945 A 4.1.4)  
45 CSR 13 – Emission limits (TV 4.1.11; R13-2945A 4.1.4)

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.*)

45 CSR 2-3.1 – Compliance with TV 4.1.1 and TV 4.1.11. is demonstrated by combusting natural gas.

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

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> F1	<b>List all emission units associated with this control device.</b> DEHY02
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<b>Manufacturer:</b> Questor (QTI)	<b>Model number:</b> E/35	<b>Installation date:</b> 2013
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**Type of Air Pollution Control Device:**

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input checked="" type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

**List the pollutants for which this device is intended to control and the capture and control efficiencies.**

Pollutant	Capture Efficiency	Control Efficiency
VOC		95%
Benzene		95%
Ethylbenzene		95%
n-Hexane		95%
Toluene		95%
Xylene		95%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Questor E/35 dehydration unit flare  
4.0 MMBtu/hr burner

**Is this device subject to the CAM requirements of 40 C.F.R. 64?**  Yes  No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** 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), “*emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act*” 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 “*emission limitations or standards for which a part 70 or 71 permit specified a continuous compliance determination method, as defined in 64.1*” is exempt from CAM. Since the R13 permit for the facility (R13-2945A) 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 10-4.1 –SO<sub>2</sub> concentration limit of 2,000 ppm (TV 3.1.9)  
45 CSR 10-5.1 –H<sub>2</sub>S concentration limit of 50 gr/100 cf gas (TV 3.1.10)  
45 CSR 6-4.1 – Particulate Matter emission limit (TV 4.1.2; R13-2945A 4.1.5.f)  
45 CSR 6-4.3 and 45 CSR 6-4.5 – Opacity Emissions Limit (TV 4.1.3 and 4.1.4)  
45 CSR 6-4.6 – Prevention of objectionable odors (TV 4.1.5)  
45 CSR 13 – Maximum capacity shall not exceed 4.0 MMBtu/hr (TV 4.1.12.a; R13-2945A 4.1.5)  
45 CSR 13 – Flare shall be in operations when the dehydration unit is processing natural gas (TV 4.1.12.b; R13-2945A 4.1.5)  
45 CSR 13 – Flare destruction efficiency limit of 95% (TV 4.1.12.c; R13-2945A 4.1.5)  
45 CSR 13 – Flare design evaluation (TV 4.1.12.d; R13-2945A 4.1.5)  
45 CSR 13 and 63.11(b)(4) – No visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours (TV 4.1.12.e; R13-2945A 4.1.5)  
45 CSR 13 and 63.11(b)(5) – Flare shall be operated with a flame present at all times (TV 4.1.12.e; R13-2945A 4.1.5)  
45 CSR 13 and 45CSR §13-5.11 – Operation and Maintenance of air pollution control equipment (TV 4.1.13; R13-2945A 4.1.6)

**Monitoring**

45 CSR 30-5.1.c – Annually sample and analyze the inlet gas stream to the station for sulfur (TV 3.2.1)  
45 CSR 30-5.1.c – Annually sample and analyze the inlet gas stream to the station for H<sub>2</sub>S (TV 3.2.2)  
45 CSR 13 and 63.11(b)(5) – Pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame (TV 4.1.12.e; R13-2945A 4.1.5)  
45 CSR 13 – Initial Method 22 (TV 4.2.2; R13-2945A 4.3.2)

**Testing**

45 CSR 13 – Upon request, conduct a flare compliance assessment (TV 4.3.3; R13-2945A 4.3.3)  
45 CSR 13 – Upon request, demonstrate compliance with HAP emissions using GLYCalc and a wet gas sample (TV 4.3.4; R13-2945A 4.3.4)

**Recordkeeping**

45 CSR 30-5.1.c – Keep records of all monitoring data (TV 4.4.1)  
45 CSR 13 – Records of maintenance performed on air pollution control equipment (TV 4.4.3; R13-2945A 4.4.2)  
45 CSR 13 – Records of malfunctions of air pollution control equipment (TV 4.4.4; R13-2945A 4.4.3)  
45 CSR 13 – Keep records of flame presence (TV 4.4.5; R13-2945A 4.4.4)  
45 CSR 13 – Keep a record of the flare design evaluation (TV 4.4.6; R13-2945A 4.4.5)  
45 CSR 13 – Keep a record of the initial Method 22 (TV 4.4.9; R13-2945A 4.4.8)

**Reporting**

45 CSR 13 – Report any deviations of the visible emission requirement (TV 4.5.1; R13-2945A 4.5.2)  
45 CSR 13 – If required to meet Condition 4.3.3, submit a protocol and notification (TV 4.5.3; R13-2945A 4.5.1)  
45 CSR 13 – Report any deviation of the flare design evaluation (TV 4.5.4; R13-2945A 4.5.3)

## **Attachment H**

Compliance Assurance Monitoring (CAM) Form

## ATTACHMENT H - Compliance Assurance Monitoring (CAM) Plan Form

For definitions and information about the CAM rule, please refer to 40 CFR Part 64. Additional information (including guidance documents) may also be found at <http://www.epa.gov/ttn/emc/cam.html>

### CAM APPLICABILITY DETERMINATION

1) Does the facility have a PSEU (Pollutant-Specific Emissions Unit considered separately with respect to **EACH** regulated air pollutant) that is subject to CAM (40 CFR Part 64), which must be addressed in this CAM plan submittal? To determine applicability, a PSEU must meet **all** of the following criteria (*If No, then the remainder of this form need not be completed*):  YES  NO

- a. The PSEU is located at a major source that is required to obtain a Title V permit;
- b. The PSEU is subject to an emission limitation or standard for the applicable regulated air pollutant that is **NOT** exempt;

#### LIST OF EXEMPT EMISSION LIMITATIONS OR STANDARDS:

- NSPS (40 CFR Part 60) or NESHAP (40 CFR Parts 61 and 63) proposed after 11/15/1990.
  - Stratospheric Ozone Protection Requirements.
  - Acid Rain Program Requirements.
  - Emission Limitations or Standards for which a WVDEP Division of Air Quality Title V permit specifies a continuous compliance determination method, as defined in 40 CFR §64.1.
  - An emission cap that meets the requirements specified in 40 CFR §70.4(b)(12).
- c. The PSEU uses an add-on control device (as defined in 40 CFR §64.1) to achieve compliance with an emission limitation or standard;
  - d. The PSEU has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than the Title V Major Source Threshold Levels; AND
  - e. The PSEU is **NOT** an exempt backup utility power emissions unit that is municipally-owned.

### BASIS OF CAM SUBMITTAL

2) Mark the appropriate box below as to why this CAM plan is being submitted as part of an application for a Title V permit:

**RENEWAL APPLICATION.** **ALL** PSEUs for which a CAM plan has **NOT** yet been approved need to be addressed in this CAM plan submittal.

**INITIAL APPLICATION** (submitted after 4/20/98). **ONLY** large PSEUs (i. e., PSEUs with potential post-control device emissions of an applicable regulated air pollutant that are equal to or greater than Major Source Threshold Levels) need to be addressed in this CAM plan submittal.

**SIGNIFICANT MODIFICATION TO LARGE PSEUs.** **ONLY** large PSEUs being modified after 4/20/98 need to be addressed in this cam plan submittal. For large PSEUs with an approved CAM plan, **Only** address the appropriate monitoring requirements affected by the significant modification.

**3) <sup>a</sup> BACKGROUND DATA AND INFORMATION**

Complete the following table for all PSEUs that need to be addressed in this CAM plan submittal. This section is to be used to provide background data and information for each PSEU In order to supplement the submittal requirements specified in 40 CFR §64.4. If additional space is needed, attach and label accordingly.

PSEU DESIGNATION	DESCRIPTION	POLLUTANT	CONTROL DEVICE	<sup>b</sup> EMISSION LIMITATION or STANDARD	<sup>c</sup> MONITORING REQUIREMENT
Request to delete the CAM Plan as the unit is subject to	Subpart HH, which has provisions for compliance monitoring established after 1990	(per 64.2(b)(1)(i)). In addition, for VOC	purposes, the facility is not subject to CAM per	64.2(b)(1)(vi) since the Title V permit specifies a "continuous compliance determination method" condition.	
<u>EXAMPLE</u> Boiler No. 1	Wood-Fired Boiler	PM	Multiclone	45CSR§2-4.1.c.; 9.0 lb/hr	Monitor pressure drop across multiclone: Weekly inspection of multiclone

<sup>a</sup> If a control device is common to more than one PSEU, one monitoring plan may be submitted for the control device with the affected PSEUs identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a). If a single PSEU is controlled by more than one control device similar in design and operation, one monitoring plan for the applicable control devices may be submitted with the applicable control devices identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a).

<sup>b</sup> Indicate the emission limitation or standard for any applicable requirement that constitutes an emission limitation, emission standard, or standard of performance (as defined in 40 CFR §64.1).

<sup>c</sup> Indicate the monitoring requirements for the PSEU that are required by an applicable regulation or permit condition.