



May 29, 2015

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

7014 3490 0000 0448 3986

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**  
**Deep Valley Compressor Station – R30-09500007-2010**

Dear Mr. Durham:

Enclosed please find the Title V Renewal Application for Dominion Transmission, Inc.'s Deep Valley Compressor Station, Permit No. R30-09500007-2010. The enclosure consists of one hard copy and two cd copies of the application that includes all attachments.

A separate R13 modification application for Deep Valley was sent into WVDEP on March 31, 2015. That modification includes the replacement of the existing:

- Dehydration unit,
- Associated reboiler, and
- Control device

Per correspondence with WVDEP, this Title V Renewal Application has not been updated with these changes.

As part of the renewal application, we request the following change to the Title V permit:

- Section 6.0 – Emergency Generators

We request that the G60-C029 requirements be spelled out and included in the Title V permit (instead of just attached to 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,

A handwritten signature in blue ink, appearing to read "Amanda B. Tornabene".

Amanda B. Tornabene  
Director, Gas Environmental Services

DEP – The original

Please scan signed original/attachments and name file as:

**Deep Valley - Title V Renewal Application – May 2015**

Please upload to Documentum

Facility:	Deep Valley Compressor Station
Title:	Deep Valley - Title V Renewal Application – May 2015
Document Type:	Permit Applications
Environmental Program:	Air – Title V General
Published?	Yes

Send document link electronically to:

Pam Faggert  
Mandy Tornabene  
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Becky Remick  
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Nick Cabo  
Tyler Moyers  
Shawn Davis  
Scott Kingston

**DEEP VALLEY COMPRESSOR STATION  
DOMINION TRANSMISSION INC.  
APPLICATION FOR TITLE V OPERATING PERMIT RENEWAL  
TITLE V OPERATING PERMIT NO: R30-09500007-2010**

**Dominion Transmission, Inc.**  
Deep Valley Compressor Station  
CR 56/1  
Deep Valley, WV 26415

**MAY 2015**

**DOMINION TRANSMISSION, INC.  
DEEP VALLEY COMPRESSOR STATION**

**TITLE V PERMIT RENEWAL APPLICATION**

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**ATTACHMENTS**

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Attachment D: Title V Equipment Table

Attachment E: Emission Unit Forms

Attachment G: Air Pollution Control Device Form

Attachment H: Compliance Assurance Monitoring (CAM) Form

**\*\*Note:** There is no Attachment F 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
General Application Forms signed by a Responsible Official	Enclosed – Section 2
Confidential Information submitted in accordance with 45CSR31	Not Applicable

## **SECTION 1**

### Introduction

## **INTRODUCTION:**

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

Deep Valley Station has the potential to emit in excess of 300 tons per year of nitrogen oxides (NO<sub>x</sub>) and 100 tons per year of volatile organic compounds (VOCs). 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. Deep Valley 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.

Deep Valley Station was originally issued a Title V Operating Permit (Permit No: R30-09500007-2006) in 2006 for a period of five (5) years, with an expiration date of May 11, 2011. Deep Valley Station is also subject to the underlying State Operating Permit (Rule 13 Permit No: R13-1104E) and General Permit (Permit No: G60-C029). The Title V operating permit is for the operation of two (2) 800 hp natural gas fired reciprocating engines (EN01 and EN02), one (1) glycol dehydrator system (DEHY01), one (1) dehydration unit reboiler (RBR01), two (2) 192.5 hp emergency generators (EG01 and EG02), and seven (7) above ground storage tanks of various sizes (TK01 – TK07).

The last Title V renewal application was submitted in 2010, with the Title V Operating Permit Renewal being issued on November 30, 2010, with an expiration date of November 30, 2015.

## **PROCESS DESCRIPTION**

Deep Valley 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 that 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 (DEHY01). 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 (RBR01), 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 (DEHY01) using the heat generated from the natural gas-fired reboiler (RBR01) to liberate the moisture and 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 Deep Valley Station:

Two (2) 800 hp Ajax DPC-800-H-1 natural gas-fired reciprocating engines/integral compressors

- Emission unit ID: 001-01 and 001-02
- Emission point ID: EN01 and EN02

Two (2) 192.5 hp Cummins GM 8.1L 4SRB emergency generators

- Emission unit ID: 002-01 and 002-02
- Emission point ID: EG01 and EG02

One (1) 1.0 MMBtu/hr Tulpro Thermal natural gas-fired dehydration unit reboiler

- Emission unit ID: 004-01
- Emission point ID: RBR01

One (1) 18.0 MMscf/day dehydration unit/still column

- Emission unit ID: 003-01
- Emission point ID: DEHY01

One (1) 5 MMBtu/hr dehydration unit controlled flare

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

One (1) 1000 gallon horizontal aboveground ethylene glycol storage tank

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

One (1) 1000 gallon horizontal aboveground triethylene glycol storage tank

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

One (1) 230 gallon horizontal aboveground wastewater storage tank

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

One (1) 4000 gallon horizontal aboveground produced fluids storage tank

- Emission unit ID: TK04
- Emission point ID: TK04

One (1) 3040 gallon horizontal aboveground lube oil storage tank

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

One (1) 500 gallon vertical aboveground waste water storage tank

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

One (1) 1000 gallon horizontal aboveground used oil storage tank

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

## **SECTION 2**

Title V Renewal Permit 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> Deep Valley Station
<b>3. DAQ Plant ID No.:</b>  095-00007	<b>4. Federal Employer ID No. (FEIN):</b>  550629203
<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? 1989 What is the expiration date of the existing permit? 11/30/2015	
<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>  0	
<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> 445 West Main Street		
<b>City:</b> Clarksburg	<b>State:</b> WV	<b>Zip:</b> 26301
<b>Telephone Number:</b> (304) 627-3225	<b>Fax Number:</b> (304) 627-3222	

<b>12. Facility Location</b>		
<b>Street:</b> CR 56/1	<b>City:</b> Deep Valley	<b>County:</b> Tyler
<b>UTM Easting:</b> 511.63 km	<b>UTM Northing:</b> 4354.77 km	<b>Zone:</b> <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
<b>Directions:</b> Travel North West on State Route 18 from West Union. At Deep Valley, take Route 56 and then follow approximately 2 miles up Raymond Ridge Road (County Route 56/1) to the site.		
<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
<b>Is facility located within 100 km of a Class I Area<sup>1</sup>?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, name the area(s).</b>
<b>If no, do emissions impact a Class I Area<sup>1</sup>?</b> <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> 445 West Main Street		
<b>City:</b> Clarksburg	<b>State:</b> WV	<b>Zip:</b> 26301
<b>Telephone Number:</b> (304) 627-3733	<b>Fax Number:</b> (304) 627-3323	
<b>E-mail address:</b> Brian.C.Sheppard@dom.com		
<b>Environmental Contact:</b> Rebekah (Becky) Remick		<b>Title:</b> Environmental Specialist III
<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 (Becky) Remick		<b>Title:</b> Environmental Specialist III
<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.**

The Deep Valley 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 receive 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

18. Applicable Requirements Summary	
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 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 checked="" 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)	

19. Non Applicability Determinations
<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>45 CSR 10 – Compressor engines (EN01 and EN02) have been excluded from the applicability of SO<sub>2</sub> and H<sub>2</sub>S limits. WVDEP determined that 45 CSR 10 is not applicable to compressor engines.</p> <p>40 CFR Subpart JJJJ – The compressor engines (EN01 and EN02) are not subject to this subpart since they were installed in 1989, 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 tanks constructed, modified, or reconstructed after August 23, 2011.</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 (RBR01) 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 (RBR01) is not applicable to this subpart since it is considered a “process heater,” which is excluded from the definition of “boiler”.</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; R13-1104E 3.1.1)  
45 CSR 6-3.2 – Open Burning exemption (TV 3.1.2; R13-1104E 3.1.2)  
40 CFR Part 61 – Asbestos inspection and removal (TV 3.1.3; R13-1104E 3.1.3)  
45 CSR 15 – Asbestos inspection and removal (TV 3.1.3; R13-1104E 3.1.3)  
45 CSR 11-5.2 – Standby plans for emergency episodes (TV 3.1.5; R13-1104E 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 – Fugitive Particulate Matter (TV 3.1.11)  
45 CSR 13 – Testing Requirements (TV 3.3.1; WV Code 22-5-4(a)(15))  
45 CSR 30-5.1(c)(2)(A) – Monitoring Recordkeeping Requirements (TV 3.4.1; R13-1104E 4.1.1)  
45 CSR 30-5.1(c)(2)(B) – Retention Recordkeeping Requirements (TV 3.4.2; R13-1104E 3.4.1)  
45 CSR 13 – Odor Recordkeeping Requirements (TV 3.4.3; R13-1104E 3.1.1)  
40 CFR Subpart JJJJ – Engine NSPS (40 CFR Part 60 )  
40 CFR Subpart HH – Dehydration Unit NESHAP (40 CFR Part 63)  
40 CFR 63 Subpart ZZZZ – RICE NESHAP (40 CFR Part 63)

### State Only

45 CSR 4 – No objectionable odors (TV 3.1.4; R13-1104E 3.1.4)  
WV Code 22-5-4(a)(14) – The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements (TV 3.1.6)  
45 CSR 30-5.1(c) – Recordkeeping Requirements (TV 3.4.3)

☐ 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 – Prior to demolition/construction, buildings will be inspected for asbestos (TV 3.1.3)  
45 CSR 15 – Prior to demolition//construction, buildings will be inspected for asbestos (TV 3.1.3)  
45 CSR 11-5.2 – Upon request by the Secretary, the permittee shall prepare a standby plan (TV 3.1.5)  
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 emissions from the facility (TV 3.1.11)  
45 CSR 30-5.1.c.2.A – Monitoring Information (TV 3.4.1; R13-1104E 4.1.1)  
45 CSR 30-5.1.c.2.B – Retention of Records (TV 3.4.2; R13-1104E 3.4.1)  
45 CSR 30-4.4 – The permittee shall certify and submit monitoring reports, compliance reports, and emissions statements as specified (TV 3.5.1)  
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 an annual compliance certification (TV 3.5.5)  
45 CSR 30-5.1.c.3.A – The permittee shall submit semi-annual monitoring reports (TV 3.6.6)  
40 CFR 60 Subpart JJJJ – For the emergency generators only: The permittee shall comply with all applicable requirements for a new, emergency, spark ignition engine.  
40 CFR 63 Subpart HH – The permittee shall comply with all applicable requirements while taking the benzene exemption.  
40 CFR 63 Subpart ZZZZ – For the emergency generators: The permittee shall comply with all applicable requirements for a new, emergency, spark ignition engine at an area source. Meeting the requirements for 40 CFR 60 Subpart JJJJ assures compliance with 40 CFR 63 Subpart ZZZZ. For the compressor engines: The permittee shall comply with all applicable requirements for an existing, non-emergency engine at an area source.

**State Only**

45 CSR 30-5.1.c – The permittee shall maintain records of all odor complaints (TV 3.4.3)  
WV Code 22-5-4 (a)(15) – Stack Testing (TV 3.3.1)  
WV Code 22-5-4 (a)(14) – The permittee shall submit emission inventory reports as required (TV 3.1.6)

**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>
R13-1104E	06/22/2010	N/A
G60-C029	02/10/2011	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)	48.5
Nitrogen Oxides (NO <sub>x</sub> )	323.8
Lead (Pb)	N/A
Particulate Matter (PM <sub>2.5</sub> ) <sup>1</sup>	0.04
Particulate Matter (PM <sub>10</sub> ) <sup>1</sup>	0.61
Total Particulate Matter (TSP)	0.61
Sulfur Dioxide (SO <sub>2</sub> )	0.04
Volatile Organic Compounds (VOC)	150.9
Hazardous Air Pollutants <sup>2</sup>	Potential Emissions
Acetaldehyde	0.4
Acrolein	0.4
Benzene	0.4
Ethylbenzene	0.7
Formaldehyde	3.1
Hexane	0.1
Toluene	1.2
Xylene	7.5
Regulated Pollutants other than Criteria and HAP	Potential Emissions

Greenhouse Gases (GHGs)	Potential Emissions
Carbon Dioxide (CO <sub>2</sub> )	7,168
Nitrous Oxide (N <sub>2</sub> O)	0.01
Methane (CH <sub>4</sub> )	181
Hydrofluorocarbons (HFCs)	N/A
Perfluorocarbons (PFCs)	N/A
Sulfur hexafluoride (SF <sub>6</sub> )	N/A
CO <sub>2</sub> equivalent (CO <sub>2</sub> e)	11,691
<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 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 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.
<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

<b>24. Insignificant Activities (Check all that apply)</b>	
	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: Brian C. Sheppard Signature Date: 05-17-15  
(Must be signed and dated in blue ink)

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

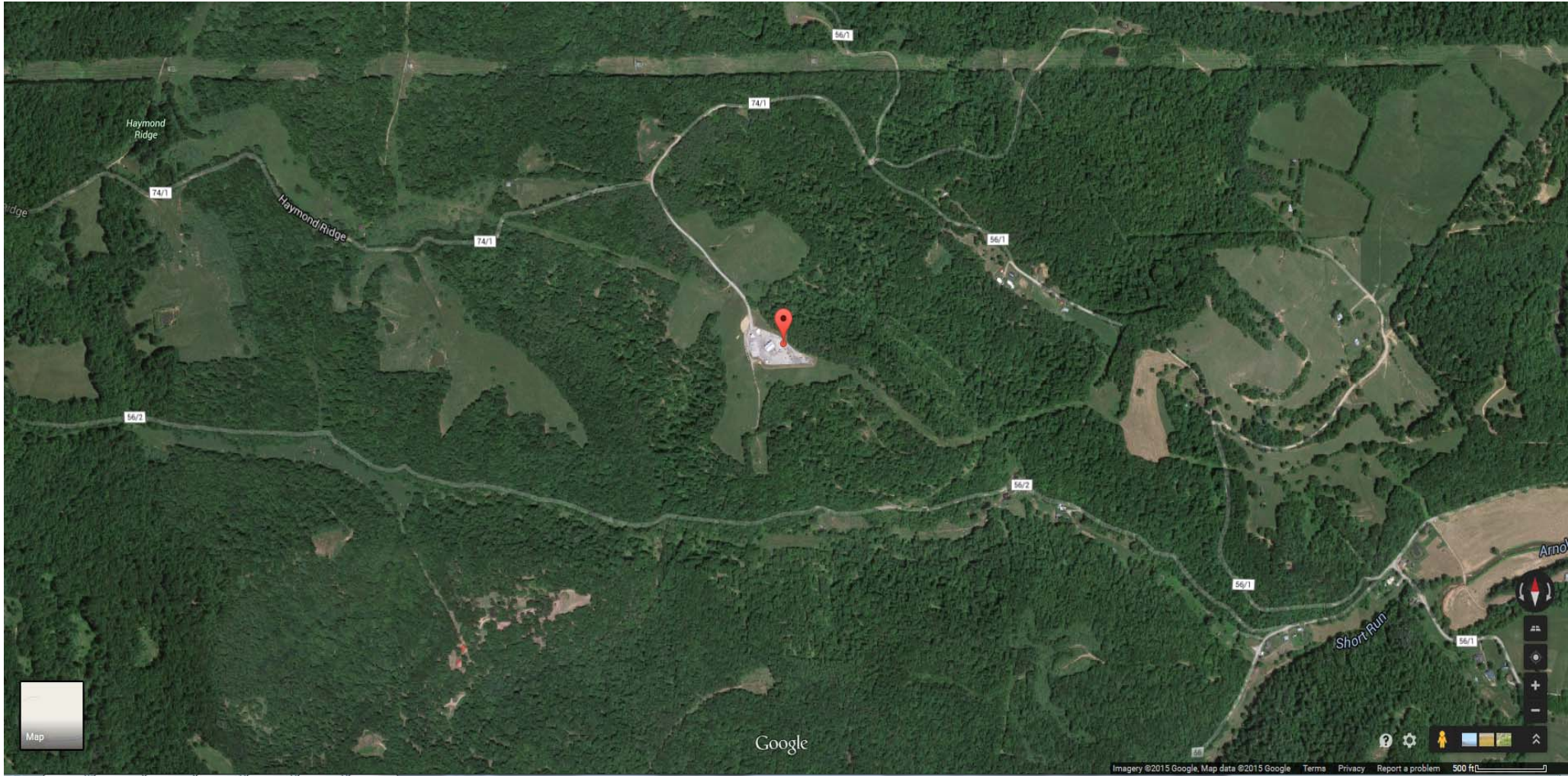
<input checked="" type="checkbox"/>	ATTACHMENT A: Area Map
<input checked="" type="checkbox"/>	ATTACHMENT B: Plot Plan(s)
<input checked="" type="checkbox"/>	ATTACHMENT C: Process Flow Diagram(s)
<input checked="" type="checkbox"/>	ATTACHMENT D: Equipment Table
<input checked="" type="checkbox"/>	ATTACHMENT 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

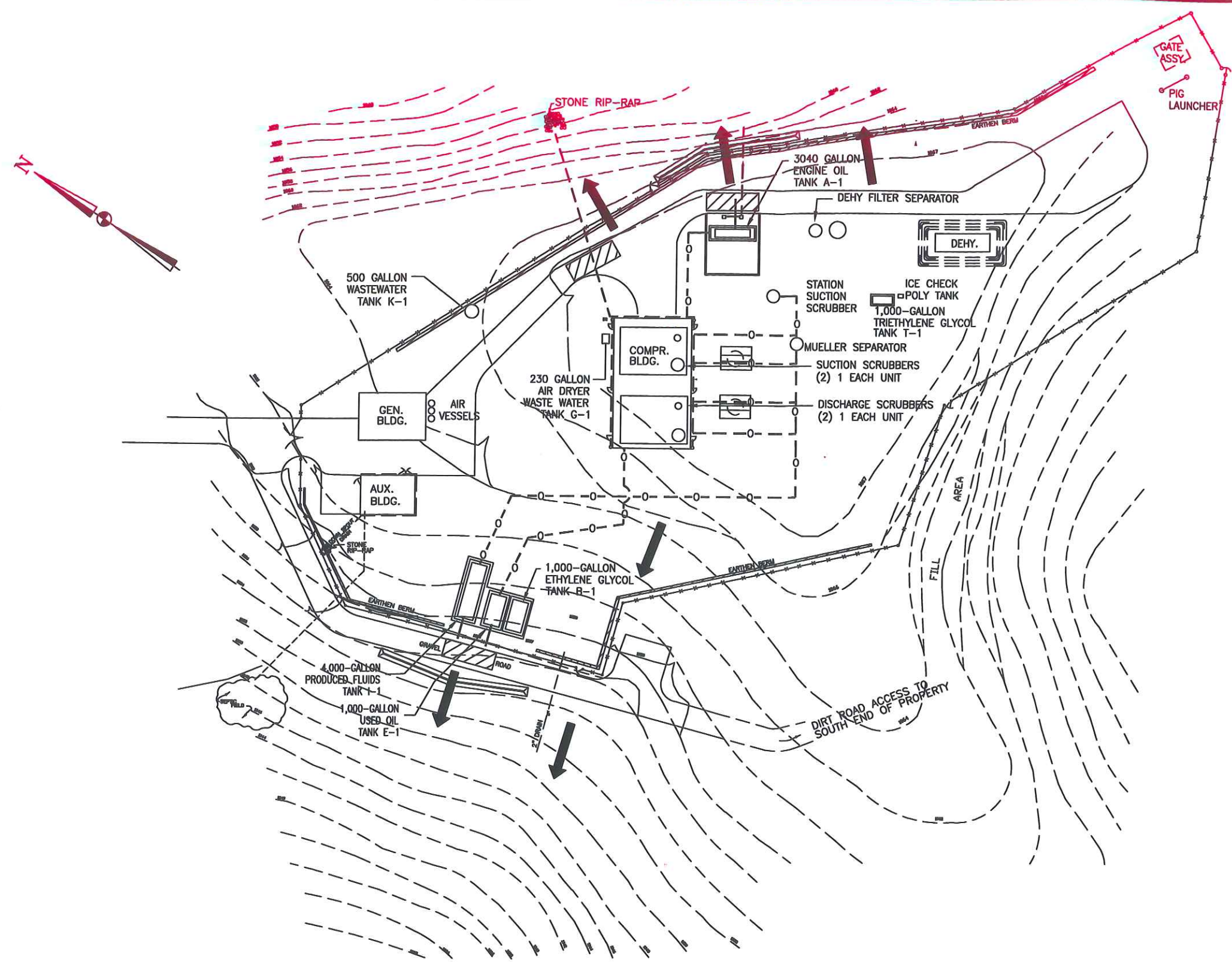




## **Attachment B**

Plot Plan





OIL CONTAINING MECHANICAL EQUIPMENT		
QUANTITY	MATERIAL	LOCATION
(2) 95-GALLONS EA.	LUBE OIL	TWO (2) 768 HP, AJAX DPC COMPRESSOR ENGINES IN COMPRESSOR BUILDING
(2) 93-GAL EA.	PRODUCED FLUIDS	UNIT DISCH. SCRUBBERS
(2) 182-GAL EA.	PRODUCED FLUIDS	UNIT SUCT. SCRUBBERS
89-GALLONS	PRODUCED FLUIDS	DEHY FILTER/SEPARATOR
430-GALLONS	PRODUCED FLUIDS	STATION SUCT. SCRUBBERS
917-GALLONS	PRODUCED FLUIDS	MUELLER VERTICAL SEPARATOR

LEGEND:

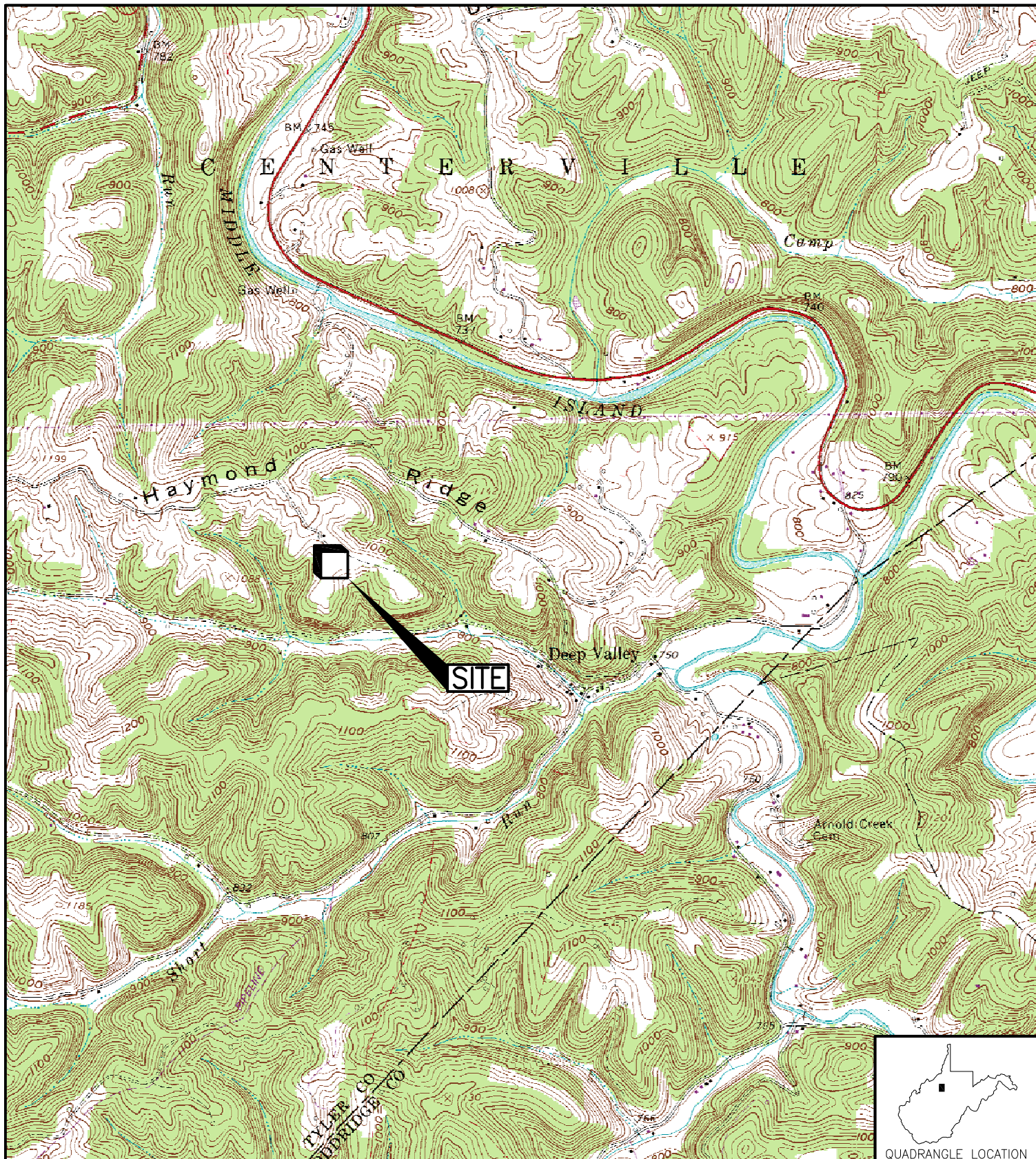
- ABOVEGROUND OIL CONTAINING PIPE
- - - UNDERGROUND OIL CONTAINING PIPE
- FLOW DIRECTION
- ▨ TRUCK LOADING/UNLOADING AREA

Note: There may be drums of various wastes and product stored on site at different times of the year. The number of drums, their types and location can vary dependant on operations needs.


TEJ/PC

SYM.	DATE	BY	REVISION DESCRIPTION	PRJ/TSK	APP.	SCALE	N.T.S.	DATE	Dominion Transmission, Inc.		
						DRAWN	DJF	9/14/07	445 West Main St. Clarksburg, West Virginia 26301 / Phone: (304) 623-8000		
						CHECKED			TITLE: DEEP VALLEY COMPRESSOR STATION		
									TYLER CO, WEST VIRGINIA		
									ENVIRONMENTAL EMERGENCY SITE PLAN		
									DIR: FILENET/FAC./COMPSTA./DEEP VALLEY	GROUP	DWG. NO.
									FILE: COMP. STA.	PRJ/TSK:	REV.
2	8/01/13	MPR	PER TIM JACKSONS MARK UPS						PD	X7951B	2
1	4/22/10	JDB	PER RUSS EVANS MARK UPS								





REFERENCE: USGS 7.5' QUADRANGLE MAP OF: WEST UNION; WEST VIRGINIA; DATED 1961, PHOTOREVISED 1976.

DRAWN BY DJF		DOMINION TRANSMISSION	
DATE		DEEP VALLEY STATION TYLER COUNTY, WEST VIRGINIA SITE LOCATION MAP	
CHECKED BY			
SET JOB NO. 207077			
SET DWG FILE DEEP_VALLEYm01.dwg	98 Vanadium Road Bridgeville, PA 15017 (412) 221-1100	DRAWING NO. FIGURE 1	REV. 0
DRAWING SCALE 1"=2000'			

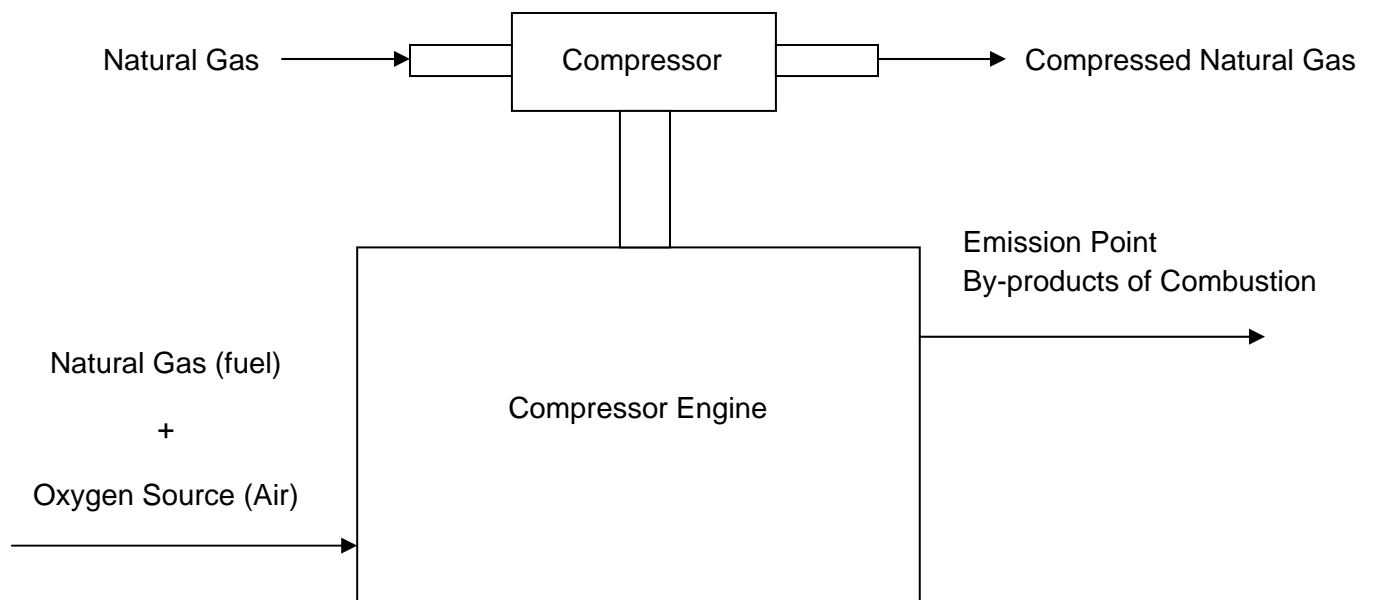
## **Attachment C**

### Process Flow Diagrams



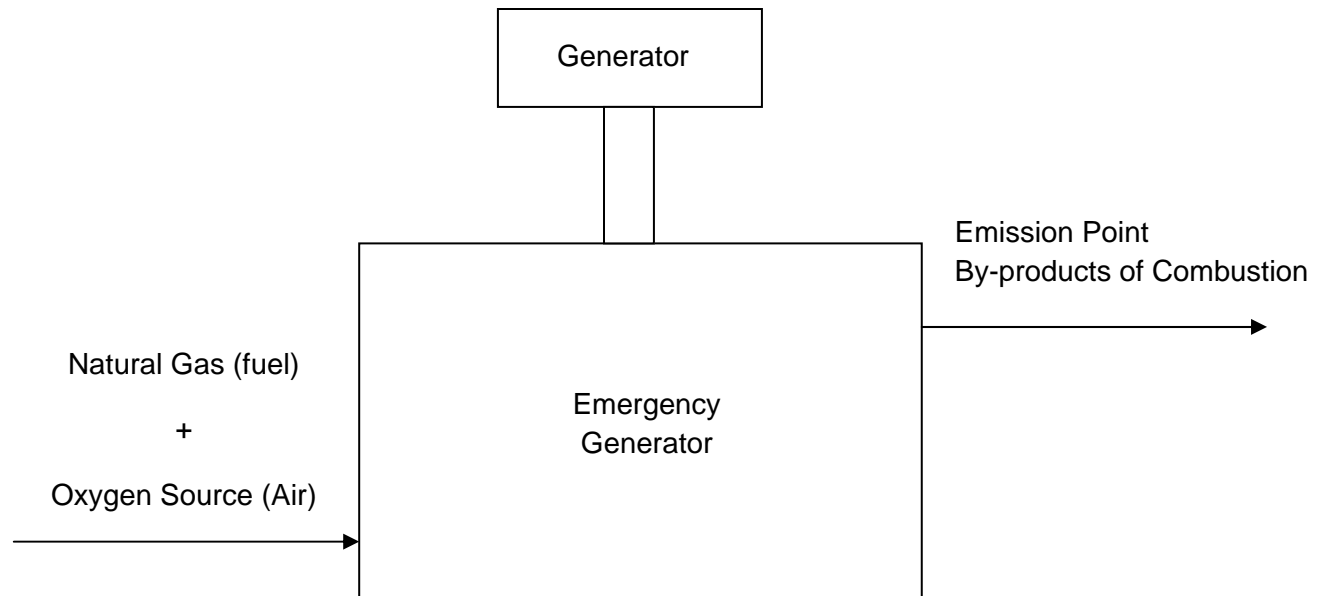
**Dominion Transmission, Inc.**  
**Deep Valley Compressor Station**

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



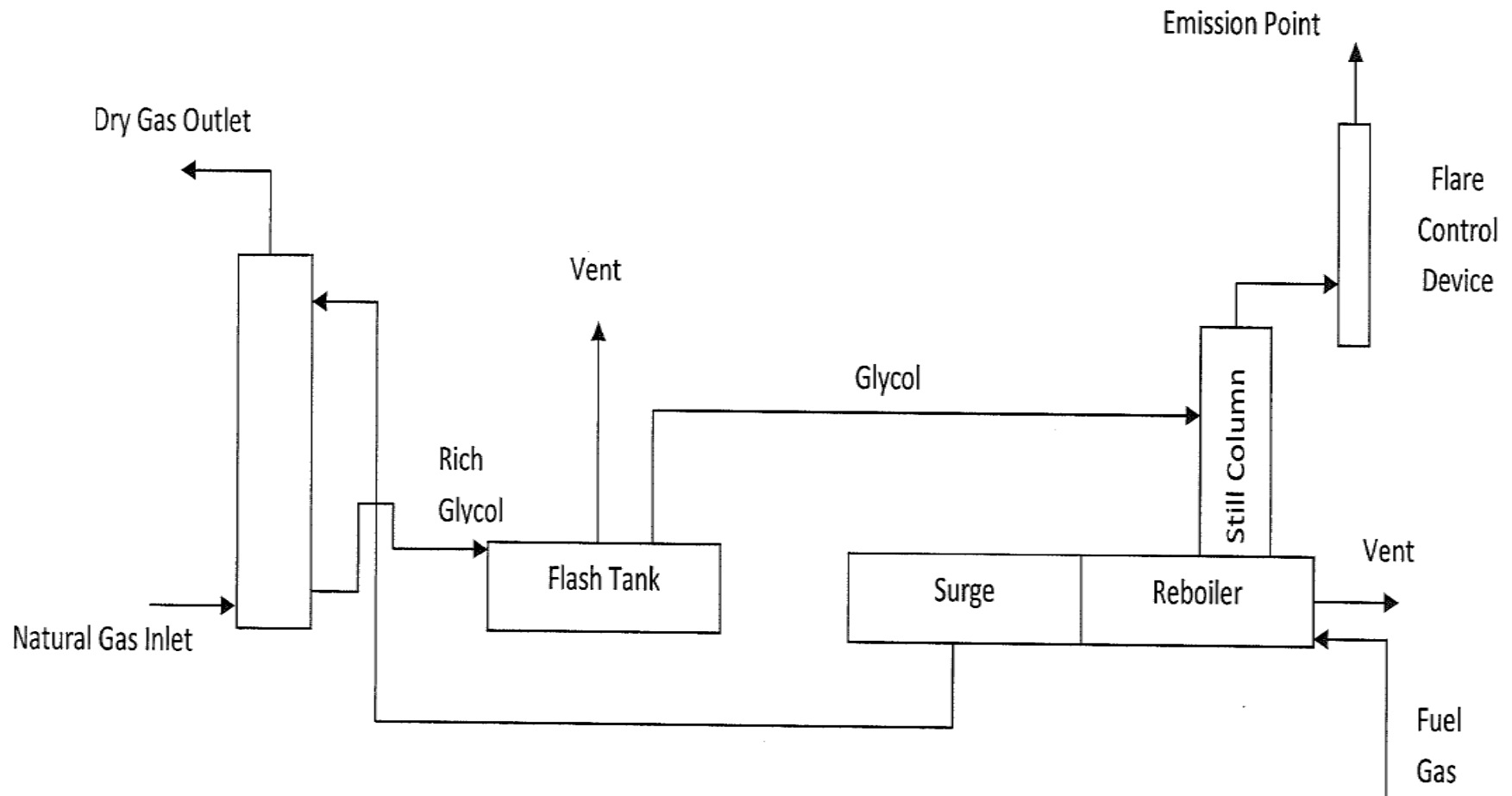
**Dominion Transmission, Inc.**  
**Deep Valley Compressor Station**

**Emergency Generators (EG01 and EG02) Process Flow Diagram**



**Dominion Transmission, Inc.**  
**Deep Valley Compressor Station**

**Dehydration Unit (F1, DEHY01, and RBR01) 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	001-01	Reciprocating Engine/Integral Compressor; Ajax DPC-800	800 hp	1989
EN02	N/A	001-02	Reciprocating Engine/Integral Compressor; Ajax DPC-800	800 hp	1989
EG01	S1	002-01	Emergency Generator, Cummins GM 8.1L; 4SRB	192.5 hp	2012
EG02	S2	002-02	Emergency Generator, Cummins GM 8.1L; 4SRB	192.5 hp	2012
DEHY01	F1	003-01	Dehydration Unit Still; Tulpro	18 MMscf/day	1989
RBR01	N/A	004-01	Dehydration Unit Reboiler; Tulpro	1.0 MMBtu/hr	1989
F1	N/A	F1	Dehydration Unit Controlled Flare	5 MMBtu/hr	1989
TK01	N/A	TK01	Horizontal Aboveground Ethylene Glycol Storage Tank	1000 gallons	2008
TK02	N/A	TK02	Horizontal Aboveground Tri-Ethylene Glycol Storage Tank	1000 gallons	1998
TK03	N/A	TK03	Horizontal Aboveground Waste Water Storage Tank	230 gallons	2003
TK04	N/A	TK04	Horizontal Aboveground Produced Fluids Storage Tank	4000 gallons	2008
TK05	N/A	TK05	Horizontal Aboveground Lube Oil Storage Tank	3040 gallons	2008
TK06	N/A	TK06	Vertical Aboveground Waste Water Storage Tank	500 gallons	2003
TK07	N/A	TK07	Horizontal Aboveground Used Oil Storage Tank	1000 gallons	2008

<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> 001-01	<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> Ajax	<b>Model number:</b> DPC-800-H-1	<b>Serial number:</b> 83243
------------------------------	-------------------------------------	--------------------------------

<b>Construction date:</b>	<b>Installation date:</b> 1989	<b>Modification date(s):</b> N/A
---------------------------	-----------------------------------	-------------------------------------

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

<b>Maximum Hourly Throughput:</b> 0.0064 MMscf/hr	<b>Maximum Annual Throughput:</b> 56.1 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> 800 hp	<b>Type and Btu/hr rating of burners:</b> 8,000 Btu/hp-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 = 0.0064 MMscf/hr  
 - Maximum annual fuel usage = 56.1 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)	5.47	23.9
Nitrogen Oxides (NO <sub>x</sub> )	36.9	161.5
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	<0.001	0.003
Particulate Matter (PM <sub>10</sub> )	0.064	0.28
Total Particulate Matter (TSP)	0.064	0.28
Sulfur Dioxide (SO <sub>2</sub> )	0.004	0.02
Volatile Organic Compounds (VOC)	5.11	22.4
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.05	0.22
Acrolein	0.05	0.22
Benzene	0.012	0.05
Ethylbenzene	<0.01	<0.01
Formaldehyde	0.35	1.55
Hexane	<0.01	0.01
Toluene	<0.01	0.03
Xylene	<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>, VOC, PM<sub>2.5</sub>, and HAP emission rates based on emission statement submittals to WVDEP.</li> <li>- CO, PM, and SO<sub>2</sub> emission factors were obtained from US EPA's AIRS report (March 1990)</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 7.1.2)  
40 CFR Part 63 Subpart ZZZZ – NESHAP Work or management practices (TV 7.1.4)  
40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions (TV 7.1.3 and 7.1.5)  
40 CFR Part 63 Subpart ZZZZ – NESHAP monitoring requirements (TV 7.2.1)  
40 CFR Part 63 Subpart ZZZZ – NESHAP recordkeeping requirements (TV 7.4.1)

\_\_\_\_ 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 (TV 7.1.2)  
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 7.1.4)  
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable general requirements/provisions (TV 7.1.3 and 7.1.5)  
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable monitoring, recordkeeping, and reporting requirements (TV 7.2.1 and 7.4.1)

**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> 001-01	<b>Emission unit name:</b> EN02 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> Ajax	<b>Model number:</b> DPC-800-H-1	<b>Serial number:</b> 83244
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<b>Construction date:</b>	<b>Installation date:</b> 1989	<b>Modification date(s):</b> N/A
---------------------------	-----------------------------------	-------------------------------------

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

<b>Maximum Hourly Throughput:</b> 0.0064 MMscf/hr	<b>Maximum Annual Throughput:</b> 56.1 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> 800 hp	<b>Type and Btu/hr rating of burners:</b> 8,000 Btu/hp-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 = 0.0064 MMscf/hr  
 - Maximum annual fuel usage = 56.1 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)	5.47	23.9
Nitrogen Oxides (NO <sub>x</sub> )	36.9	161.5
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	<0.001	0.003
Particulate Matter (PM <sub>10</sub> )	0.064	0.28
Total Particulate Matter (TSP)	0.064	0.28
Sulfur Dioxide (SO <sub>2</sub> )	0.004	0.02
Volatile Organic Compounds (VOC)	5.11	22.4
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.05	0.22
Acrolein	0.05	0.22
Benzene	0.012	0.05
Ethylbenzene	<0.01	<0.01
Formaldehyde	0.35	1.55
Hexane	<0.01	0.01
Toluene	<0.01	0.03
Xylene	<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>, VOC, PM<sub>2.5</sub>, and HAP emission rates based on emission statement submittals to WVDEP.</li> <li>- CO, PM, and SO<sub>2</sub> emission factors were obtained from US EPA's AIRS report (March 1990)</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 7.1.2)  
40 CFR Part 63 Subpart ZZZZ – NESHAP Work or management practices (TV 7.1.4)  
40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions (TV 7.1.3 and 7.1.5)  
40 CFR Part 63 Subpart ZZZZ – NESHAP monitoring requirements (TV 7.2.1)  
40 CFR Part 63 Subpart ZZZZ – NESHAP recordkeeping requirements (TV 7.4.1)

\_\_\_\_ 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 (TV 7.1.2)  
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 7.1.4)  
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable general requirements/provisions (TV 7.1.3 and 7.1.5)  
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable monitoring, recordkeeping, and reporting requirements (TV 7.2.1 and 7.4.1)

**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> 003-01	<b>Emission unit name:</b> DEHY01 Dehydration Unit	<b>List any control devices associated with this emission unit:</b> F1
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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> Tulpro	<b>Model number:</b>	<b>Serial number:</b>
<b>Construction date:</b>	<b>Installation date:</b> 1989	<b>Modification date(s):</b> N/A

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

18 MMscf /day

<b>Maximum Hourly Throughput:</b> 18 MMscf /day	<b>Maximum Annual Throughput:</b> 6,570 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 <u> X </u> No	<b>If yes, is it?</b>  ___ Indirect Fired    ___ 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 hourly wet gas usage = 18 MMscf/day
- Maximum annual wet gas usage = 6,570 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)	0.02	0.09
Nitrogen Oxides (NO <sub>x</sub> )	0.10	0.44
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	0.05
Total Particulate Matter (TSP)	0.01	0.05
Sulfur Dioxide (SO <sub>2</sub> )	<0.01	<0.01
Volatile Organic Compounds (VOC)	11.93	52.25
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.07	0.28
Ethylbenzene	0.16	0.7
n-Hexane	<0.01	0.02
Toluene	0.26	1.15
Xylenes	1.71	7.47
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>VOC and HAP emission rates were obtained from GRI GLYCalc V4.0.  PM emission factors were obtained from Table 1.4-1 of AP-42 (7/93)  NO<sub>x</sub>, CO, and SO<sub>2</sub> emission factor was obtained from Table 1.4-2 of AP-42 (7/93)</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 10-4.1 – SO<sub>2</sub> emissions shall not exceed 2,000 ppm by volume (TV 3.1.9)  
45 CSR 10-5.1 – H<sub>2</sub>S emissions shall not exceed 50 gr/100 cf (TV 3.1.10)  
45 CSR 13 – HAP emissions shall be less than 10 tons/yr of any single HAP and 25 tons/yr of an combination of HAPs (TV 3.1.12; R13-1104E 4.1.2)  
45 CSR 13 – The maximum wet natural gas shall not exceed 19 MMcf/day (TV 5.1.1; R13-1104E 6.1.1)  
45 CSR 13 – Maximum emissions from F1 (TV 5.1.2; R13-1104E 6.1.2)  
45 CSR 13 – Determining potential HAP emissions (TV 5.1.3; R13-1104E 6.1.3; NESHAP Subpart HH)  
45 CSR 13 – Design and operation of the flare (TV 5.1.4; R13-1104E 6.1.4)  
45 CSR 13 – Flare design evaluation (TV 5.1.5; R13-1104E 6.1.5)  
45 CSR 13 – Visible emission limit of the flare (TV 5.1.6 and 5.1.7; R13-1104E 6.1.6 and 6.1.7)  
45 CSR 13 – Install, maintain, and operate all pollution control equipment (TV 5.1.10; R13-1104E 4.1.3)

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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 30-5.1(c) – SO<sub>2</sub> emissions shall be complied with by annual sampling of inlet natural gas stream (TV 3.2.2)  
45 CSR 30-5.1(c) – H<sub>2</sub>S emissions shall be complied with by annual sampling of inlet natural gas stream (TV 3.2.3)  
45 CSR 13 – Monitor the presence or absence of a flare pilot flame using a thermocouple or equivalent device. Keep records (TV 5.2.1 and 5.4.2; R13-1104E 6.2.1 and 6.4.2)  
45 CSR 13 – Maintain monthly records of the wet natural gas throughput for up to 5 years on site and using a 12-month rolling total (TV 5.2.2 and 5.4.6; R13-1104E 6.2.2 and 6.4.6)  
45 CSR 13 – Initial Method 22 to show compliance with visible emission limit; keep records (TV 5.3.1 and 5.4.5; R13-1104E 6.3.1 and 6.4.5)  
45 CSR 13 – Determining potential HAP emissions using GLYCalc per NESHAP Subpart HH upon request from Director (TV 5.3.3; R13-1104E 6.3.3)  
45 CSR 13 – Keep records of the flare design evaluation (TV 5.4.2; R13-1104E 6.4.3)  
45 CSR 13 – Maintain records of any occurrences of malfunctions or shutdown of the air pollution control equipment (TV 5.4.8; R13-1104E 4.1.4)

**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> 004-01	<b>Emission unit name:</b> RBR01 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> Tulpro	<b>Model number:</b>	<b>Serial number:</b>
<b>Construction date:</b>	<b>Installation date:</b> 1989	<b>Modification date(s):</b> N/A

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

1.0 MMBtu/hr

<b>Maximum Hourly Throughput:</b> 960 cf/hr	<b>Maximum Annual Throughput:</b> 8.41 MMcf/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> 1.0 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 = 960 cf/hr
- Maximum annual fuel usage = 8.41 MMcf/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)	0.08	0.35
Nitrogen Oxides (NO <sub>x</sub> )	0.10	0.42
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)	0.01	0.03
Sulfur Dioxide (SO <sub>2</sub> )	0.00	0.00
Volatile Organic Compounds (VOC)	0.01	0.02
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	<0.00	<0.00
Ethylbenzene	<0.00	<0.00
n-Hexane	<0.00	<0.00
Toluene	<0.00	<0.00
Xylenes	<0.00	<0.00
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>  CO and NO <sub>x</sub> emission factors based on emission required permitted maximums. All other emission factors are from AP-42 – 1.4 Natural Gas Combustion.		

***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 – HAP emissions shall be less than 10 tons/yr of any single HAP and 25 tons/yr of any combination of HAPs (TV 3.1.12; R13-1104E 4.1.2)

45 CSR 2-3.1 – Opacity limit of less than 10% (TV 4.1.1; R13-1104E 5.1.1)

45 CSR 2-3.2 and 13 – Compliance with visible emission requirement shall be determined in accordance with NSPS Appendix A, Method 9 (TV 4.1.2; R13-1104E 5.1.2)

45 CSR 13 – Maximum design heat input shall not exceed 1.0 MMBtu/hr (TV 4.1.3; R13-1104E 5.1.3)

45 CSR 13 – Quantity of natural gas consumed shall not exceed 960 cf/hr or 8.41 MMcf/yr (TV 4.1.4; R13-1104E 5.1.4)

45 CSR 13 – Maximum emissions shall not exceed prescribed limits (TV 4.1.5; R13-1104E 5.1.5)

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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 2-3.1, 2-3.2, and 13 – Performing Method 9 emission observations upon request from the Department (TV 4.2.1; R13-1104E 5.2.1)

45 CSR 13 – Monitor the natural gas consumed on a monthly basis (TV 4.2.2; R13-1104E 5.2.2)

45 CSR 13 – Maintain records of the amount of natural gas consumed for 5 years (TV 4.4.1; R13-1104E 5.3.1)

**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> EG01	<b>Emission unit name:</b> 4SRB Emergency Generator (002-01)	<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> Gen: Cummins Engine: PSI/General Motors/Vortec Engines	<b>Model number:</b> Gen: 125 GGLA-6209521 Engine: GM-8.1L	<b>Serial number:</b> Gen: L100175395 Engine: 8.1L24733
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<b>Construction date:</b> 2010	<b>Installation date:</b> 2012	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**

192.5 hp

<b>Maximum Hourly Throughput:</b> 1,667 cf/hr	<b>Maximum Annual Throughput:</b> 0.834 MMcf/yr	<b>Maximum Operating Schedule:</b> 500 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> 192.5 hp	<b>Type and Btu/hr rating of burners:</b> 1.67 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 = 1,667 cf/hr
- Maximum annual fuel usage = 0.834 MMcf/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)	0.39	0.10
Nitrogen Oxides (NO <sub>x</sub> )	0.03	0.01
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.02	<0.01
Particulate Matter (PM <sub>10</sub> )	0.02	<0.01
Total Particulate Matter (TSP)	0.02	<0.01
Sulfur Dioxide (SO <sub>2</sub> )	<0.01	<0.01
Volatile Organic Compounds (VOC)	0.19	0.05
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	0.03	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>, VOC, and SO<sub>2</sub> emission rates were based on manufacturer's technical data sheet.</li> <li>- All other emission rates were based off of USEPA's AP-42, Section 3.2, Natural Gas-Fired Reciprocating Engines, 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.**

45 CSR 13 – Operate and maintain according to manufacturer (G60-C029 5.1.1)  
45 CSR 13 – Emission limits (G60-C029 5.1.2)  
45 CSR 13 – Maximum fuel consumption (G60-C029 5.1.3)  
45 CSR 13 – Catalyst control requirements (G60-C029 5.1.4)  
40 CFR Part 60 Subpart JJJJ – NSPS emission limits (G60-C029 8.2.5)  
40 CFR Part 60 Subpart JJJJ – NSPS emergency definition; limitation on maintenance and readiness testing to 100 hrs/yr (G60-C029 8.4.4)  
40 CFR Part 63 Subpart ZZZZ – RICE NESHAP as a new, emergency, spark ignition engine at an area source (40 CFR 63 Subpart ZZZZ)

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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 – Regularly inspect, properly maintain and/or replace catalytic reduction devices (G60-C029 5.2.1)  
45 CSR 13 – Record hours of operation and fuel consumption on a monthly basis; keep records for 5 years (G60-C029 5.4.1)  
40 CFR Part 60 Subpart JJJJ – Purchase a certified engine to meet NSPS emission limits (G60-C029 8.4.1)  
40 CFR Part 60 Subpart JJJJ – Install non-resettable hour meter to demonstrate compliance with 7.1.4 (G60-C029 8.3.8)  
40 CFR Part 60 Subpart JJJJ – Comply with all applicable monitoring, reports, and recordkeeping requirements (G60-C029 8.6.1)  
40 CFR Part 63 Subpart ZZZZ – Compliance with NSPS Subpart JJJJ shows compliance with NESHAP Subpart ZZZZ (TV 6.1.1)

**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> EG02	<b>Emission unit name:</b> 4SRB Emergency Generator (002-02)	<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> Gen: Cummins Engine: PSI/General Motors/Vortec Engines	<b>Model number:</b> Gen: 125 GGLA-6209521 Engine: GM-8.1L	<b>Serial number:</b> Gen: L100175397 Engine: 8.1L24730
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<b>Construction date:</b> 2010	<b>Installation date:</b> 2012	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**

192.5 hp

<b>Maximum Hourly Throughput:</b> 1,667 cf/hr	<b>Maximum Annual Throughput:</b> 0.834 MMcf/yr	<b>Maximum Operating Schedule:</b> 500 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> 192.5 hp	<b>Type and Btu/hr rating of burners:</b> 1.67 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 = 1,667 cf/hr
- Maximum annual fuel usage = 0.834 MMcf/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)	0.39	0.10
Nitrogen Oxides (NO <sub>x</sub> )	0.03	0.01
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.02	<0.01
Particulate Matter (PM <sub>10</sub> )	0.02	<0.01
Total Particulate Matter (TSP)	0.02	<0.01
Sulfur Dioxide (SO <sub>2</sub> )	<0.01	<0.01
Volatile Organic Compounds (VOC)	0.19	0.05
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	0.03	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>, VOC, and SO<sub>2</sub> emission rates were based on manufacturer's technical data sheet.</li> <li>- All other emission rates were based off of USEPA's AP-42, Section 3.2, Natural Gas-Fired Reciprocating Engines, 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.**

45 CSR 13 – Operate and maintain according to manufacturer (G60-C029 5.1.1)  
45 CSR 13 – Emission limits (G60-C029 5.1.2)  
45 CSR 13 – Maximum fuel consumption (G60-C029 5.1.3)  
45 CSR 13 – Catalyst control requirements (G60-C029 5.1.4)  
40 CFR Part 60 Subpart JJJJ – NSPS emission limits (G60-C029 8.2.5)  
40 CFR Part 60 Subpart JJJJ – NSPS emergency definition; limitation on maintenance and readiness testing to 100 hrs/yr (G60-C029 8.4.4)  
40 CFR Part 63 Subpart ZZZZ – RICE NESHAP as a new, emergency, spark ignition engine at an area source (40 CFR 63 Subpart ZZZZ)

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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 – Regularly inspect, properly maintain and/or replace catalytic reduction devices (G60-C029 5.2.1)  
45 CSR 13 – Record hours of operation and fuel consumption on a monthly basis; keep records for 5 years (G60-C029 5.4.1)  
40 CFR Part 60 Subpart JJJJ – Purchase a certified engine to meet NSPS emission limits (G60-C029 8.4.1)  
40 CFR Part 60 Subpart JJJJ – Install non-resettable hour meter to demonstrate compliance with 7.1.4 (G60-C029 8.3.8)  
40 CFR Part 60 Subpart JJJJ – Comply with all applicable monitoring, reports, and recordkeeping requirements (G60-C029 8.6.1)  
40 CFR Part 63 Subpart ZZZZ – Compliance with NSPS Subpart JJJJ shows compliance with NESHAP Subpart ZZZZ (TV 6.1.1)

**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> F1	<b>List all emission units associated with this control device.</b> DEHY01	
<b>Manufacturer:</b>	<b>Model number:</b>	<b>Installation date:</b> 1989
<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		95%
Benzene		95%
Ethylbenzene		95%
n-Hexane		95%
Toluene		95%
Xylene		95%
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>  Tulpro dehydration unit controlled flare 5 MMBtu/hr non-assisted burner		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  If Yes, <b>Complete ATTACHMENT H</b> If No, <b>Provide justification.</b>		

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

45 CSR 13 – Maximum emissions from the flare shall not exceed permit limits (TV 5.1.2; R13-1104E 6.1.2)

45 CSR 13 – Flare shall be designed and operated with specified terms (TV 5.1.4; R13-1104E 6.1.4)

45 CSR 13 – Permittee is not required to conduct a flare compliance assessment until the Director requests one. The permittee is required to conduct a flare design evaluation or demonstrate compliance with the flare design criteria in TV 5.1.4 by complying with testing in TV 5.3.2 (TV 5.1.5; R13-1104E 6.1.5)

45 CSR 6-4.3, 6-4.4, and 13 – Visible particulate matter emissions from the flare shall not exceed 20 % opacity. Does not apply to smoke which is less than 40% opacity, for a period or periods aggregating no more than 8 minutes per start-up (TV 5.1.6 and 5.1.7; R13-1104E 6.1.6 and 6.1.7)

45 CSR 6-4.6 and 13 – The flare including all associated equipment and grounds, shall be designed, operated, and maintained so as to prevent the emission of odors (TV 5.1.8; R13-1104E 6.1.8)

45 CSR 13 – Particulate matter cannot exceed determined quantity (TV 5.1.9)

45 CSR 13 – Install, maintain, and operate all pollution control equipment (TV 5.1.10; R13-1104E 4.1.3)

45 CSR 13 – The flame will be monitored by a thermocouple or other equivalent device, except during SSM events (TV 5.2.1; R13-1104E 6.2.1)

45 CSR 13 – The throughput of wet natural gas feed to the dehydration unit (DEHY01) shall be monitored on a monthly basis (TV 5.2.2; R13-1104E 6.2.2)

45 CSR 13 – Conduct an initial Method 22 (TV 5.3.1; R13-1104E 6.3.1)

45 CSR 13 – Permittee will conduct a flare compliance assessment to demonstrate compliance upon request by the Director (TV 5.3.2; R13-1104E 6.3.2)

45 CSR 13 – Maintain and record the times and durations of all periods during which the pilot flame was absent (TV 5.4.1; R13-1104E 6.4.1)

45 CSR 13 – Maintain and keep a record of the flare design evaluation (TV 5.4.2; R13-1104E 6.4.2)

45 CSR 13 – Records shall be maintained that demonstrate compliance with HAP emission thresholds using GLYCalc (TV 5.4.3; R13-1104E 6.4.3)

45 CSR 13 – Records shall be maintained of all monitoring and testing (TV 5.4.4; R13-1104E 6.4.4)

45 CSR 13 – Records shall be maintained of visible emission opacity tests (Method 22) conducted (TV 5.4.5; R13-1104E 6.4.5)

## **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
PSEU CAM plan has already been approved; no new plans.					
<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.