



December 18, 2015

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

9590 9401 0037 5168 3632 05

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  
Yellow Creek Compressor Station – R30-01300001-2011**

Dear Mr. Durham:

Enclosed please find the Title V Renewal Application for Dominion Transmission, Inc.'s Yellow Creek Compressor Station, Permit No. R30-01300001-2011. The enclosure consists of one hard copy and two cd copies of the application that includes all attachments.

As part of the renewal application, the equipment list has been updated based on recent updates to the Yellow Creek Station:

- Equipment removed from the facility
  - CPR01 – Air Compressor; Kohler K341S (16 hp)
  - TK02 – 4,200 gal Horizontal Aboveground Storage Tank (Produced Fluids)
  - TK06 – 4,200 gal Vertical Aboveground Storage Tank (Engine Oil)
  - TK07 – 4,200 gal Vertical Aboveground Storage Tank (Engine Oil)
- Equipment added to the facility:
  - CPR02 – Air Compressor; Gardner Denver - Honda GX340 (11 hp)
  - TK10 – 1,000 gal Horizontal Aboveground Storage Tank (Used Triethylene Glycol)
  - TK11 – 2,000 gal Horizontal Aboveground Storage Tank (Used Oil)
  - TK12 – 4,200 gal Horizontal Aboveground Storage Tank (Produced Fluids)
  - TK13 – 6,000 gal Vertical Aboveground Storage Tank (Engine Oil)

- Correction to equipment at the facility:
  - TK01 – This tank was previously listed as a horizontal aboveground storage tank, but the correct description is a vertical aboveground storage tank.
  - Engines EN02 and EN03 - We request that the horsepower rating of Engines EN02 and EN03 be listed as 1,000 hp instead of 1,100 hp. It was noted during review of the equipment for this Title V renewal application that the horsepower rating is actually 1,000 hp. Previous potential to emit (PTE) calculations were based off of 1,000 hp, but previous Title V renewal applications incorrectly listed the horsepower rating as 1,100 hp.

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

- Section 6.0 – Engines

We request that NESHAP Subpart ZZZZ “remote” requirements be spelled out and included in the Title V permit for engines EN02 and EN03 as they are remote engines under the NESHAP. As a result, the other NESHAP requirements for these engines would be removed.

- Section 7.0 – Emergency Generators

We request that the G60-C034 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,



Amanda B. Tornabene  
Director, Gas Environmental Services

**YELLOW CREEK COMPRESSOR STATION  
DOMINION TRANSMISSION INC.  
APPLICATION FOR TITLE V OPERATING PERMIT RENEWAL  
TITLE V OPERATING PERMIT NO: R30-01300001-2011**

**Dominion Transmission, Inc.**  
Yellow Creek Compressor Station  
H.C. 71, Box 8  
Big Springs, WV 26137

**DECEMBER 2015**

**DOMINION TRANSMISSION, INC.  
YELLOW CREEK COMPRESSOR STATION**

**TITLE V PERMIT RENEWAL APPLICATION**

**TABLE OF CONTENTS**

Title V Permit Application Checklist for Administrative Completeness Cross Reference

Section 1: Introduction

Section 2: Title V Renewal Permit Application – General Forms

**ATTACHMENTS**

Attachment A: Area Map

Attachment B: Plot Plan

Attachment C: Process Flow Diagrams

Attachment D: Title V Equipment Table

Attachment E: Emission Unit Forms

Attachment G: Air Pollution Control Device Form

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

# **SECTION 1**

Introduction

## **INTRODUCTION:**

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

Yellow Creek Station has the potential to emit in excess of 100 tons per year of nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOCs), and carbon monoxide (CO). 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. Yellow Creek 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.

Yellow Creek Station was originally issued a Title V Operating Permit (Permit No: R30-01300001-2006) in 2006 for a period of five (5) years, with an expiration date of November 2, 2011. Yellow Creek Station is also subject to the underlying State Operating Permit (Rule 13 Permit No: R13-2614B) and General Permit (Permit No: G60-C034). The Title V operating permit is for the operation of one (1) 1100 hp natural gas fired reciprocating engine (EN01), two (2) 1000 hp natural gas fired reciprocating engines (EN02 and EN03), one (1) glycol dehydrator system (DEHY02) with thermal oxidizer (2C), one (1) dehydration unit reboiler (RBR02), two (2) 192.5 hp emergency generators (EG01 and EG02), one (1) 11 hp air compressor (CPR02), and ten (10) above ground storage tanks of various sizes (TK01, TK03 - TK05, and TK08 – TK13).

The last Title V renewal application was submitted in 2010, with the Title V Operating Permit Renewal being issued on July 13, 2011, with an expiration date of July 13, 2016.

## **PROCESS DESCRIPTION**

Yellow Creek Station is a compressor facility that services a natural gas pipeline system. The compressor engines (EN01 – EN03) 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 (DEHY02). The dehydration unit removes moisture and impurities from the gas stream. Emergency backup power is supplied by emergency generators (EG01 and EG02).

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 thermal oxidizer (2C) to combust the hydrocarbons; thereby, reducing overall emissions and odor. The thermal oxidizer is permitted with a destruction efficiency of 95%. The compressed, dehydrated gas then enters the pipeline.

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

One (1) 1100 hp Cooper GMV-10TF natural gas-fired reciprocating engine/integral compressor

- Emission unit ID: EN01
- Emission point ID: EN01

Two (2) 1000 hp Ingersoll Rand 103 KVG-HL natural gas-fired reciprocating engines/integral compressors

- Emission unit ID: EN02 and EN03
- Emission point ID: EN02 and EN03

Two (2) 192.5 hp Cummins GM8.1L emergency generators

- Emission unit ID: EG01 and EG02
- Emission point ID: EG01 and EG02

One (1) 0.75 MMBtu/hr Inegral natural gas-fired dehydration unit reboiler

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

One (1) 20 MMscf/day dehydration unit/still column with flash tank

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

One (1) 4.78 MMBtu/hr dehydration unit controlled thermal oxidizer

- Emission unit ID: 2C
- Emission point ID: 2C

One (1) 11 hp Gardner Denver – Honda GX340 air compressor

- Emission unit ID: CPR02
- Emission point ID: CPR02

One (1) 4200 gallon vertical aboveground triethylene glycol storage tank

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

One (1) 2000 gallon horizontal aboveground methanol storage tank

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

One (1) 4200 gallon vertical aboveground ethylene glycol storage tank

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

One (1) 4200 gallon vertical aboveground methanol storage tank

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

One (1) 4200 gallon vertical aboveground waste oil storage tank

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

One (1) 500 gallon vertical aboveground wastewater storage tank

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

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

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

One (1) 2000 gallon horizontal aboveground used oil storage tank

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

One (1) 4200 gallon horizontal aboveground produced fluids storage tank

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

One (1) 6000 gallon vertical aboveground engine oil storage tank

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

## **SECTION 2**

Title V Renewal Permit Application -  
General Forms



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

<b>12. Facility Location</b>		
<b>Street:</b> HC 71, Box 8	<b>City:</b> Big Springs	<b>County:</b> Calhoun
<b>UTM Easting:</b> 495.80 km	<b>UTM Northing:</b> 4314.80 km	<b>Zone:</b> <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
<b>Directions:</b> Take Interstate 79 North to the Big Otter Exit. Take Route 16 North through Grantsville. After leaving Grantsville, travel on Rt. 16N for approximately 6.1 miles to Calhoun County Rt. 6 (Klipstine Road). Turn right on Rt. 6 and travel 1 mile; station is to the right of road.		
<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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>If yes, name the affected state(s).</b>	
<b>Is facility located within 100 km of a Class I Area<sup>1</sup>?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, name the area(s).</b> Dolly Sobs Wilderness Area Otter Creek Wilderness Area	
<b>If no, do emissions impact a Class I Area<sup>1</sup>?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		
<sup>1</sup> Class I areas include Dolly Sobs 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.**

Yellow Creek Station is a compressor facility that services a natural gas pipeline system. The compressor engines (EN01 – EN03) 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.

- 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 – EN03) are not subject to this subpart since they were manufactured in 1977, 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 R13-2614B 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) – The annual emission inventory reporting (TV 3.1.6)
- 40 CFR Part 82 Subpart F – Ozone depleting substances (TV 3.1.7)
- 40 CFR Part 68 – Risk Management Plan (TV 3.1.8)
- State Only: 45 CSR 17-3.1 – Fugitive particulate matter (TV 3.1.10)
- 45 CSR 13 – Operation and Maintenance of APCE (TV 3.1.11; R13-2614B 4.1.8)

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 – The permittee will limit fugitive emissions from the facility by burning only pipeline quality natural gas (TV 3.1.10)
- 45 CSR 13 – The permittee shall install, maintain, and operate control equipment properly for minimizing emissions (TV 3.1.11; R13-2914B 4.1.8)
- 45 CSR 13 and WV Code 22-5-4(a)(14 - 15) – Testing requirements (TV 3.3.1)
- 45 CSR 30 – Recordkeeping Requirements (TV 3.4)
- 45 CSR 30 – 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**.

<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>
R13-2614B	07/28/2015	N/A
G60-C034	06/27/2011	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)	246.15
Nitrogen Oxides (NO <sub>x</sub> )	445.68
Lead (Pb)	N/A
Particulate Matter (PM <sub>2.5</sub> ) <sup>1</sup>	2.42
Particulate Matter (PM <sub>10</sub> ) <sup>1</sup>	2.42
Total Particulate Matter (TSP)	3.57
Sulfur Dioxide (SO <sub>2</sub> )	0.08
Volatile Organic Compounds (VOC)	184.33
Hazardous Air Pollutants <sup>2</sup>	Potential Emissions
Acetaldehyde	0.52
Acrolein	0.50
Benzene	0.55
Ethylbenzene	0.21
Formaldehyde	3.73
Hexane	0.22
Toluene	1.76
Xylene	6.70
Regulated Pollutants other than Criteria and HAP	Potential Emissions

<sup>1</sup>PM<sub>2.5</sub> and PM<sub>10</sub> are components of TSP.  
<sup>2</sup>For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

**Section 4: Insignificant Activities**

<b>24. Insignificant Activities (Check all that apply)</b>	
<input checked="" type="checkbox"/>	1. Air compressors and pneumatically operated equipment, including hand tools.
<input type="checkbox"/>	2. Air contaminant detectors or recorders, combustion controllers or shutoffs.
<input checked="" type="checkbox"/>	3. Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
<input checked="" type="checkbox"/>	4. Bathroom/toilet vent emissions.
<input checked="" 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"/>	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.  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:  _____ _____ _____ _____ _____
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input checked="" type="checkbox"/>	22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
<input type="checkbox"/>	23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
<input type="checkbox"/>	24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
<input type="checkbox"/>	25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
<input checked="" 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.

<b>24. Insignificant Activities (Check all that apply)</b>	
<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:  \_\_\_\_\_  
(Must be signed and dated in blue ink)

Signature Date: 12/07/15

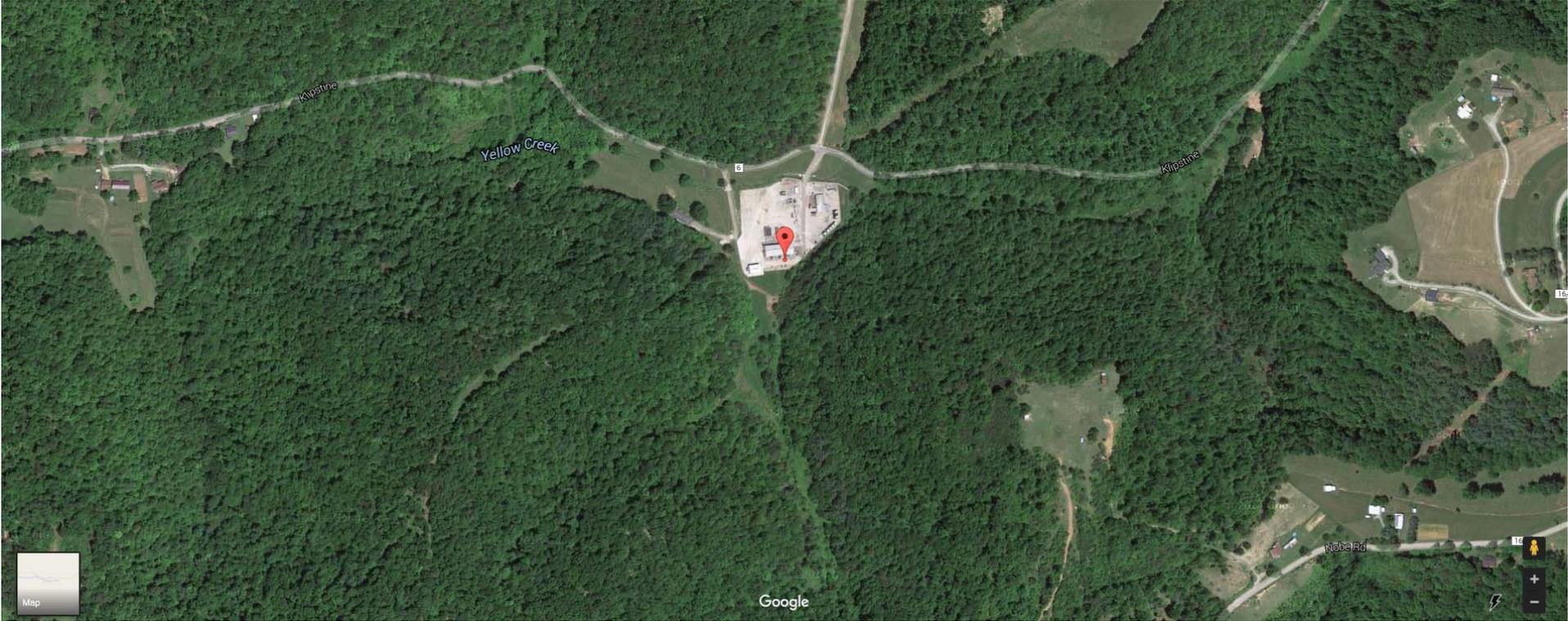
**Note: Please check all applicable attachments included with this permit application:**

<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 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/daq](http://www.dep.wv.gov/daq), requested by phone (304) 926-0475, and/or obtained through the mail.*

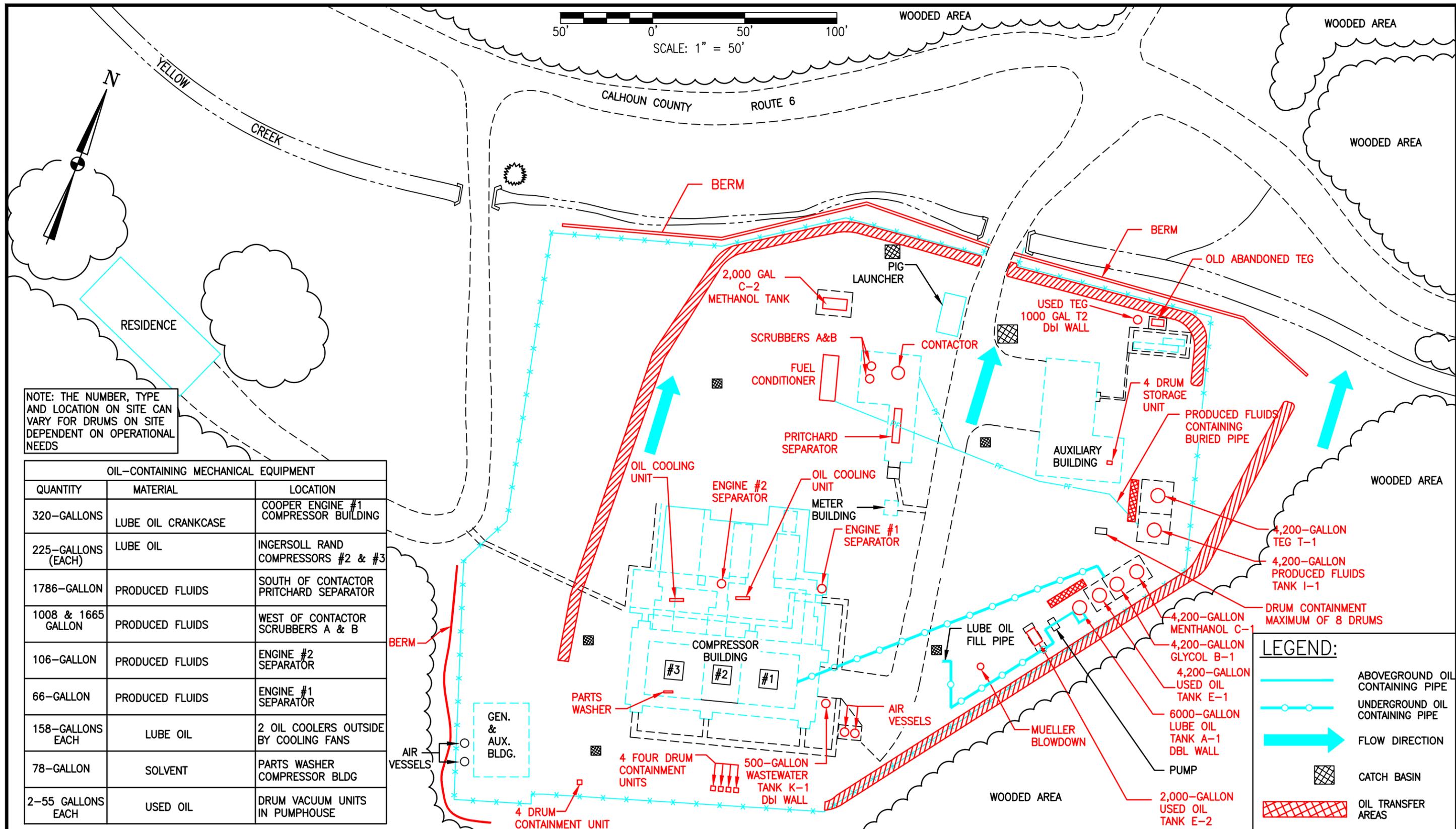
## **Attachment A**

Area Map



## **Attachment B**

Plot Plan



NOTE: THE NUMBER, TYPE AND LOCATION ON SITE CAN VARY FOR DRUMS ON SITE DEPENDENT ON OPERATIONAL NEEDS

OIL-CONTAINING MECHANICAL EQUIPMENT		
QUANTITY	MATERIAL	LOCATION
320-GALLONS	LUBE OIL CRANKCASE	COOPER ENGINE #1 COMPRESSOR BUILDING
225-GALLONS (EACH)	LUBE OIL	INGERSOLL RAND COMPRESSORS #2 & #3
1786-GALLON	PRODUCED FLUIDS	SOUTH OF CONTACTOR PRITCHARD SEPARATOR
1008 & 1665 GALLON	PRODUCED FLUIDS	WEST OF CONTACTOR SCRUBBERS A & B
106-GALLON	PRODUCED FLUIDS	ENGINE #2 SEPARATOR
66-GALLON	PRODUCED FLUIDS	ENGINE #1 SEPARATOR
158-GALLONS EACH	LUBE OIL	2 OIL COOLERS OUTSIDE BY COOLING FANS
78-GALLON	SOLVENT	PARTS WASHER COMPRESSOR BLDG
2-55 GALLONS EACH	USED OIL	DRUM VACUUM UNITS IN PUMPHOUSE

**LEGEND:**

- ABOVEGROUND OIL CONTAINING PIPE
- UNDERGROUND OIL CONTAINING PIPE
- FLOW DIRECTION
- CATCH BASIN
- OIL TRANSFER AREAS

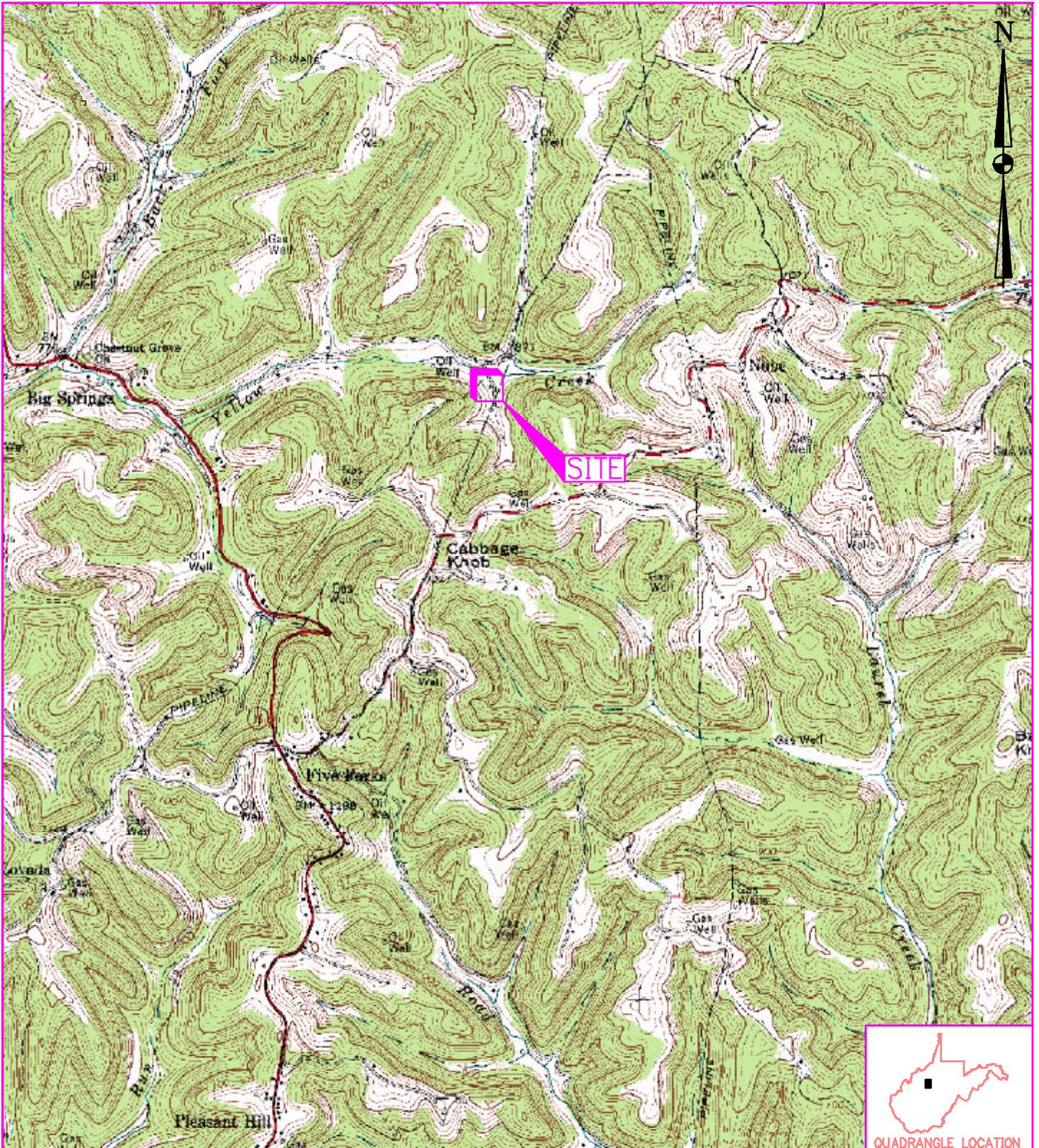
SYM.	DATE	BY	REVISION DESCRIPTION	PRJ/TSK	APP.	SCALE	DATE
7	05/12/15	TBB	REMOVE TANK A-1; RENAME TANK A-2 TO TANK A-1 AND REVISE SIZE; RESIZE TANK E-2			1" = 50'	09/27/07
6	10/16/14	TBB	VERIFY SCALE, REVISED NORTH ARROW, ADDED ADJACENT PROPERTIES, & ADDED BAR SCALE				
5	02/18/14	DRC	REVISION PER TIM JACKSONS MARKUPS				
4	11/22/13	DRC	REVISION PER TIM JACKSONS MARKUPS				
3	08/14/13	DRC	REVISION PER TIM JACKSONS MARKUPS				

**Dominion Transmission, Inc.**  
 445 West Main St. Clarksburg, West Virginia 26301 / Phone: (304) 623-8000

FOR: **YELLOW CREEK COMPRESSOR STATION**

TITLE: **ENVIRONMENTAL EMERGENCY SITE PLAN**

DIR: <b>DOCUMENTUM</b>	GROUP: <b>PD</b>	DWG. NO.: <b>X9778</b>	REV.: <b>7</b>
FILE:	PRJ/TSK:		



REFERENCE: USGS 7.5' QUADRANGLE MAP OF: GRANTSVILLE, WEST VIRGINIA; DATED 1966

DRAWN BY	DJF
DATE	
CHECKED BY	
SET JOB NO.	205032-07
SET DWG FILE	YELLOW_CREEKm01.dwg
DRAWING SCALE	1"=2000'



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

**DOMINION TRANSMISSION**  
 YELLOW CREEK COMPRESSOR STATION  
 CENTER DISTRICT, CALHOUN COUNTY, WEST VIRGINIA  
 SITE LOCATION MAP

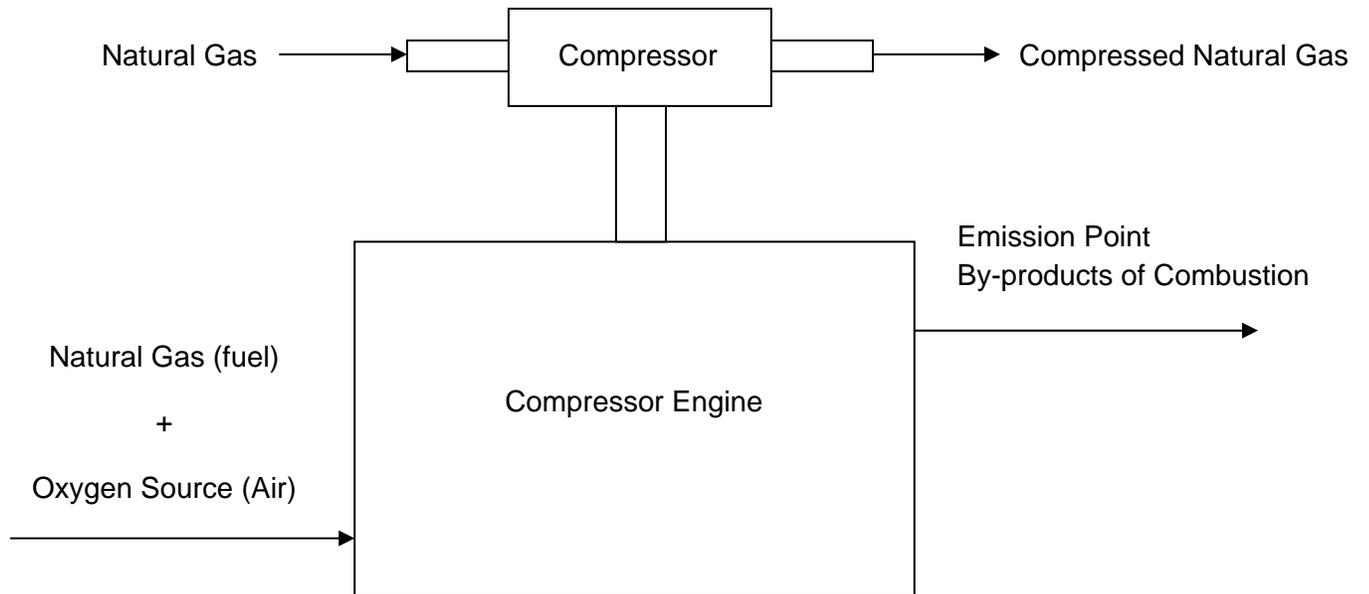
DRAWING NO.	FIGURE 1	REV.	0
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## **Attachment C**

### Process Flow Diagrams

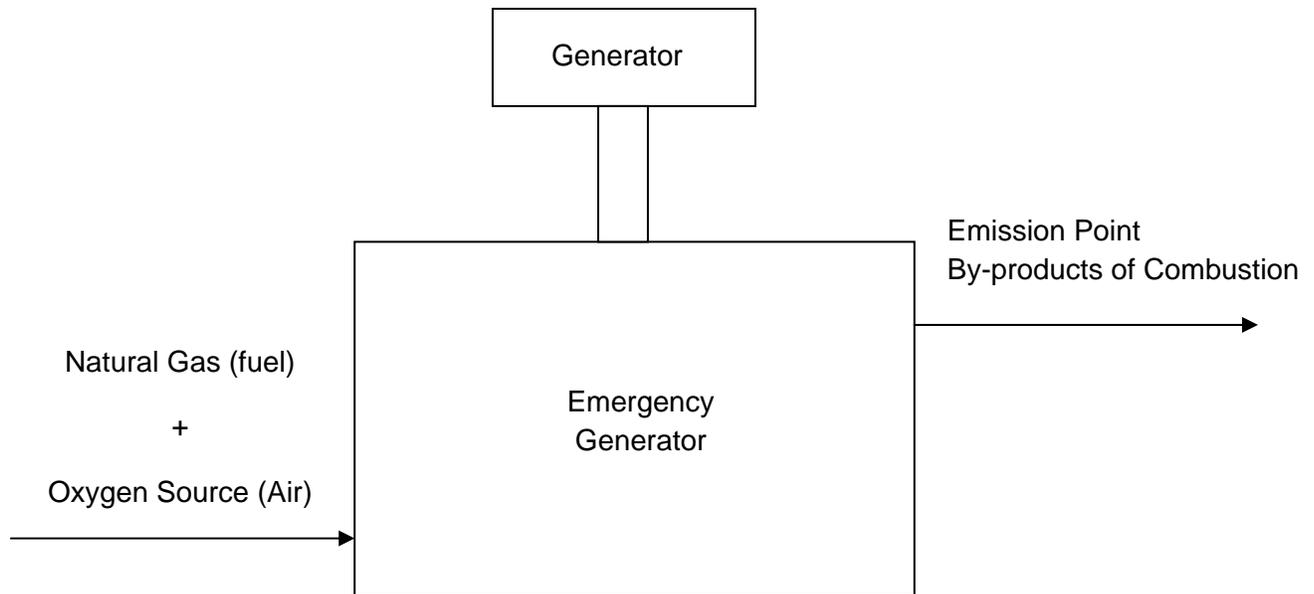
**Dominion Transmission, Inc.**  
**Yellow Creek Compressor Station**

**Compressor Engines (EN01 – EN03) Process Flow Diagram**



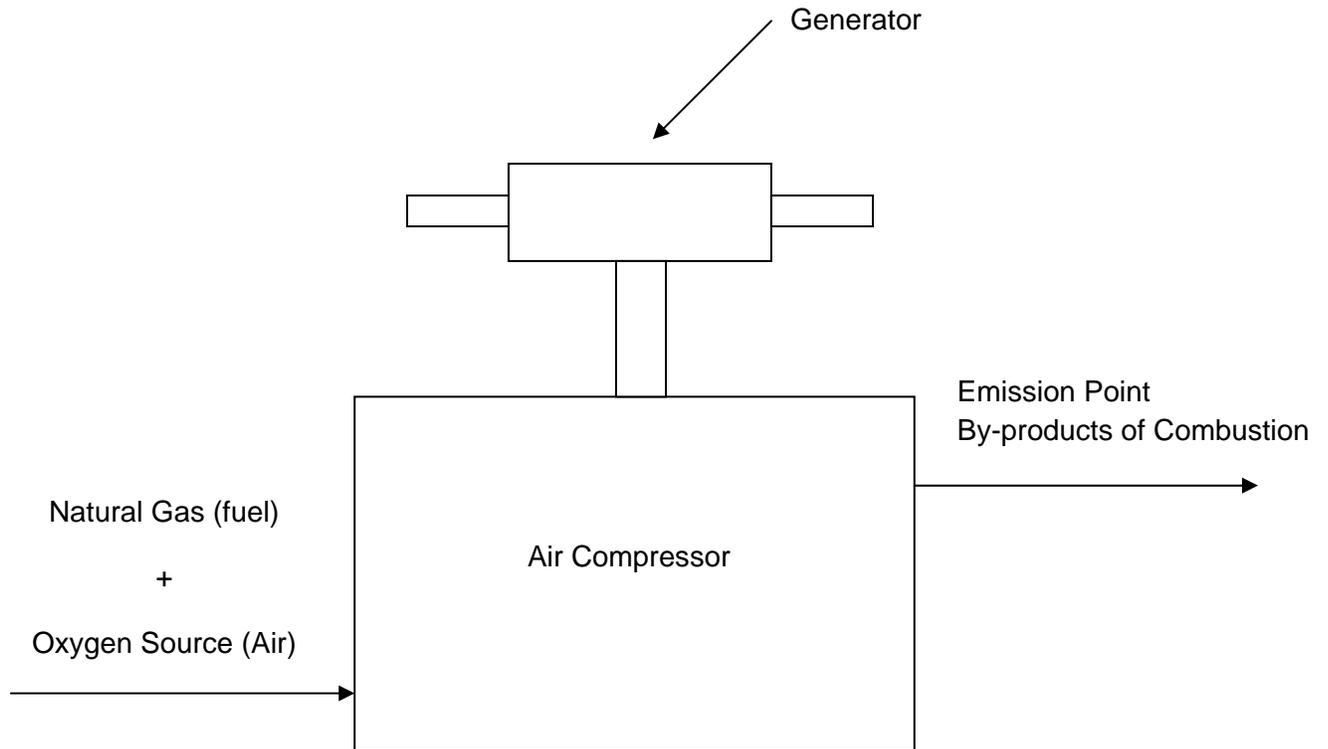
**Dominion Transmission, Inc.**  
**Yellow Creek Compressor Station**

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



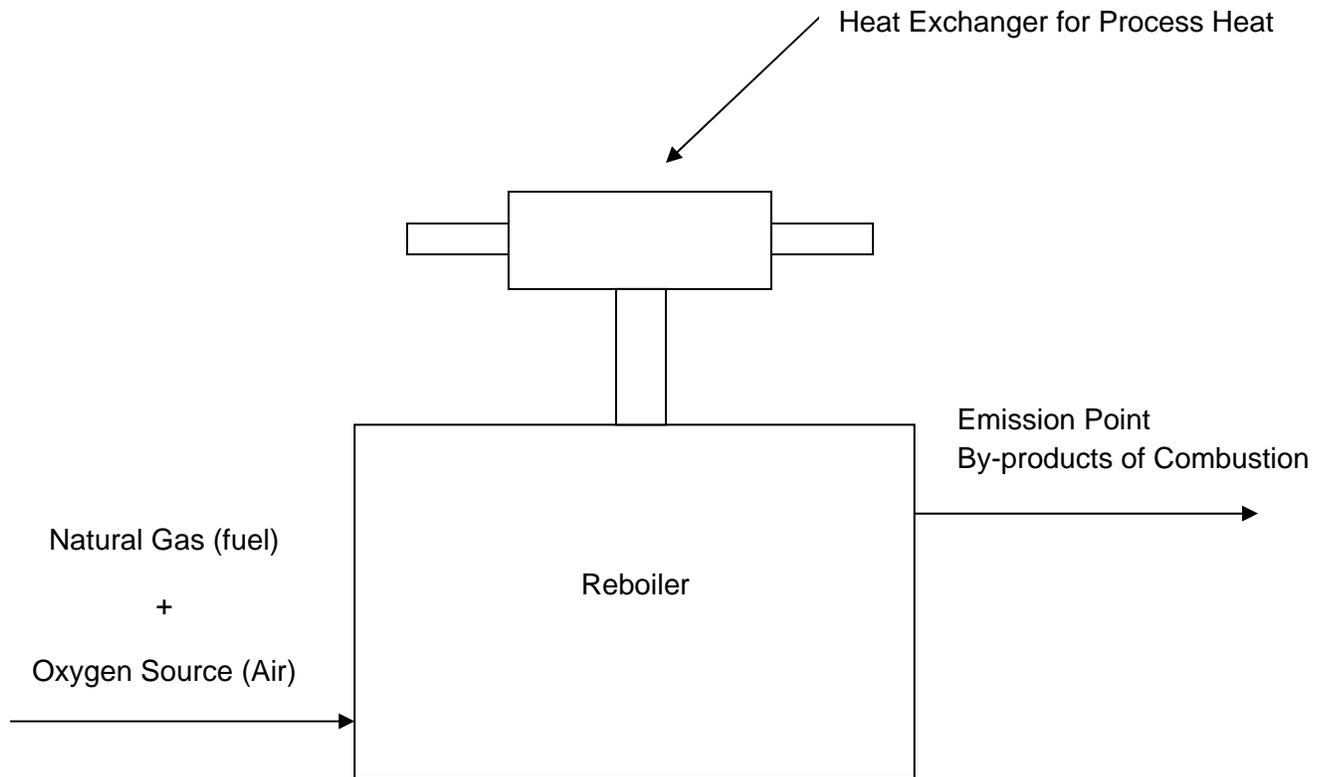
**Dominion Transmission, Inc.**  
**Yellow Creek Compressor Station**

**Air Compressor (CPR02) Process Flow Diagram**



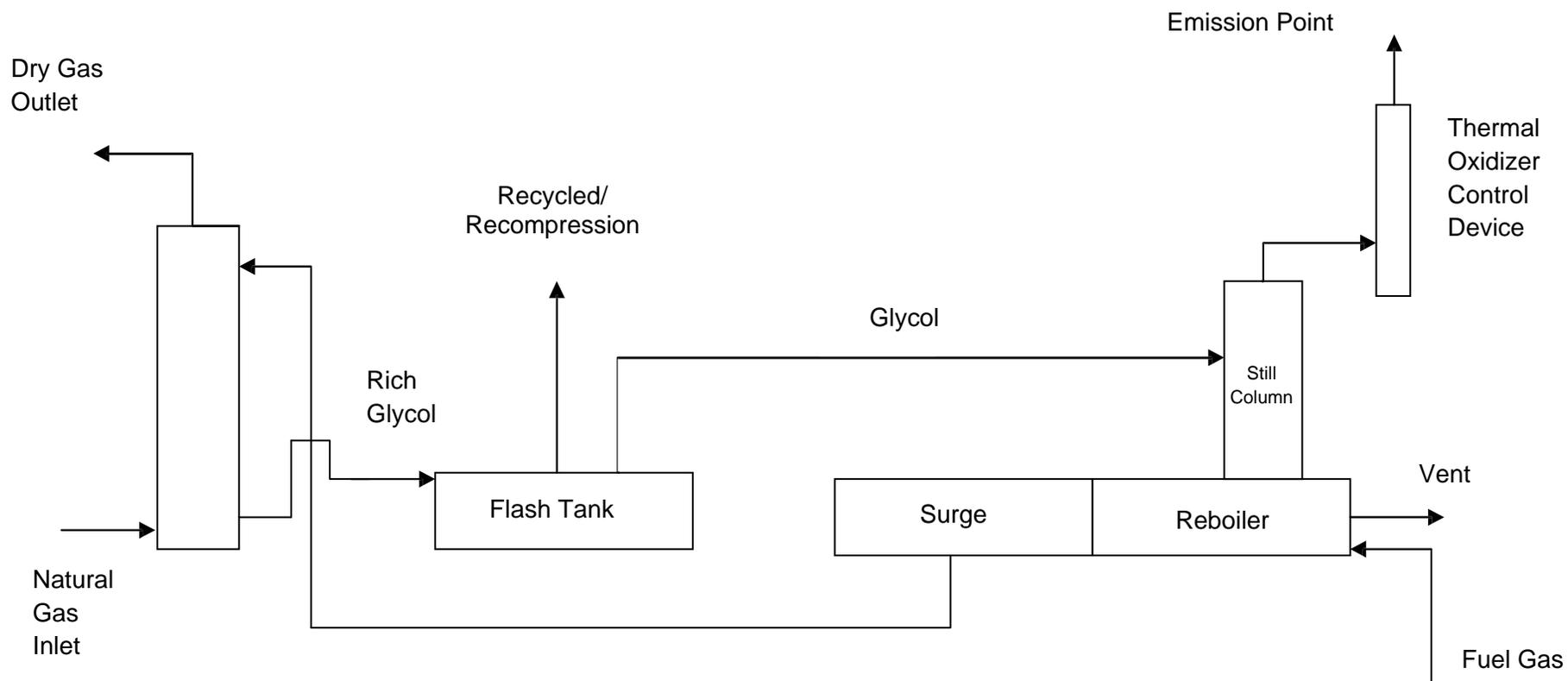
**Dominion Transmission, Inc.**  
**Yellow Creek Compressor Station**

**Reboiler (RBR02) Process Flow Diagram**



**Dominion Transmission, Inc.**  
**Yellow Creek Compressor Station**

**Dehydration Unit (DEHY02, 2C, 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 GMV-10TF	1,100 hp	1977
EN02	N/A	EN02	Reciprocating Engine/Integral Compressor; Ingersoll Rand 103KVG-HL	1,000 hp	1977
EN03	N/A	EN03	Reciprocating Engine/Integral Compressor; Ingersoll Rand 103KVG-HL	1,000 hp	1977
EG01	C1 (catalyst)	EG01	Emergency Generator, Cummins GM 8.1L, 4SRB, SI	192.5 hp	2011
EG02	C2 (catalyst)	EG02	Emergency Generator, Cummins GM 8.1L, 4SRB, SI	192.5 hp	2011
DEHY02 (2C)	2C	DEHY02	Dehydration Unit Still Column	20 MMscf/day	~ 2016
n/a	n/a		Dehydration Unit Flash Tank		
RBR02	N/A	RBR02	Dehydration Unit Reboiler	0.75 MMBtu/hr	~ 2016
2C	N/A	2C	Thermal Oxidizer	4.78 MMBtu/hr	~ 2016
TK01	N/A	TK01	Vertical Aboveground Storage Tank – Triethylene Glycol	4,200 Gallons	1978
TK03	N/A	TK03	Horizontal Aboveground Storage Tank – Methanol	2,000 Gallons	1978
TK04	N/A	TK04	Vertical Aboveground Storage Tank – Ethylene Glycol	4,200 Gallons	1991
TK05	N/A	TK05	Vertical Aboveground Storage Tank – Methanol	4,200 Gallons	1991
TK08	N/A	TK08	Vertical Aboveground Storage Tank – Waste Oil	4,200 Gallons	1991
TK09	N/A	TK09	Vertical Aboveground Storage Tank – Wastewater	500 Gallons	2001
New units (updates) to equipment list:					
CPR02	N/A	CPR02	Air Compressor, Gardner Denver - Honda GX340	11 hp	2012
TK10	N/A	TK10	Horizontal Aboveground Storage Tank – Used Triethylene Glycol	1,000 Gallons	1978
TK11	N/A	TK11	Horizontal Aboveground Storage Tank – Used Oil	2,000 Gallons	2013
TK12	N/A	TK12	Horizontal Aboveground Storage Tank – Produced Fluids	4,200 Gallons	2015
TK13	N/A	TK13	Vertical Aboveground Storage Tank – Engine Oil	6,000 Gallons	2015

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
Units that have been removed:					
CPR01	N/A	CPR01	Air Compressor, Kohler K341S	16 hp	1991
TK02	N/A	TK02	Horizontal Aboveground Storage Tank – Produced Fluids	4,200 Gallons	1978
TK06	N/A	TK06	Vertical Aboveground Storage Tank – Engine Oil	4,200 Gallons	1991
TK07	N/A	TK07	Vertical Aboveground Storage Tank – Engine Oil	4,200 Gallons	1991
<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> CPR02	<b>Emission unit name:</b> Air 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 emergency air compressor

<b>Manufacturer:</b> Gardner Denver - Honda	<b>Model number:</b> GX340	<b>Serial number:</b>
------------------------------------------------	-------------------------------	-----------------------

<b>Construction date:</b> 2011	<b>Installation date:</b> 2012	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**

11 hp

<b>Maximum Hourly Throughput:</b> 162 scf/hr	<b>Maximum Annual Throughput:</b> 1.42 MMscf/yr	<b>Maximum Operating Schedule:</b> 8760 hrs/yr
-------------------------------------------------	----------------------------------------------------	---------------------------------------------------

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

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

<b>Maximum design heat input and/or maximum horsepower rating:</b> 11 hp	<b>Type and Btu/hr rating of burners:</b> 0.16 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 = 162 scf/hr
  - Maximum annual fuel usage = 1.42 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)	0.60	2.64
Nitrogen Oxides (NO <sub>x</sub> )	0.37	1.61
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)	< 0.01	0.02
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	< 0.01	0.02
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>- NO<sub>x</sub> and CO emissions calculated from AP-42, Section 3.2, Natural Gas-Fired Reciprocating Engines, Table 3.2-3, 7/00 (worst case factors)</li> <li>- PM, SO<sub>2</sub>, VOC, and HAP emissions calculated from AP-42, Section 3.2, Natural Gas-Fired Reciprocating Engines, Table 3.2-3, 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.

- 40 CFR Part 60 Subpart JJJJ – NSPS certified engine requirements
- 40 CFR Part 60 Subpart JJJJ – NSPS operating requirements
- 40 CFR Part 60 Subpart JJJJ – NSPS recordkeeping requirements
- 40 CFR Part 63 Subpart ZZZZ – If you meet NSPS Subpart JJJJ requirements, you meet NESHAP Subpart ZZZZ requirements.

\_\_\_\_ 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 60.4233(a) and 60.4231(a) - Purchase engine certified by manufacturer to meet the requirements for new nonroad SI engines.
- 40 CFR 60.4234 - Operate and maintain the certified engine according to the manufacturer's emission-related written instructions.
- 40 CFR 60.4245(a) and 60.4243(a)(1) – Keep records of the (1) documentation from the manufacturer that the engine is certified to meet appropriate emission standards for size and model year and (2) engine maintenance to demonstrate compliance with manufacturer emission-related instructions.
- 40 CFR 63.6590(c) - New stationary engines at area sources must comply with 40 CFR Part 60 Subpart JJJJ to comply with 40 CFR 63 Subpart ZZZZ.

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

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

## ATTACHMENT E - Emission Unit Form

***Emission Unit Description***

<b>Emission unit ID number:</b> DEHY02	<b>Emission unit name:</b> DEHY02 Dehydration Unit	<b>List any control devices associated with this emission unit:</b> Thermal Oxidizer (2C)
-------------------------------------------	----------------------------------------------------------	----------------------------------------------------------------------------------------------

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

Dehydration unit still column

<b>Manufacturer:</b> Inegral	<b>Model number:</b>	<b>Serial number:</b>
<b>Construction date:</b> ~ 2016	<b>Installation date:</b> ~ 2016	<b>Modification date(s):</b> N/A

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

20 MMscf /day

<b>Maximum Hourly Throughput:</b> 20 MMscf /day	<b>Maximum Annual Throughput:</b> 7,300 MMscf/yr	<b>Maximum Operating Schedule:</b> 8760 hrs/yr
----------------------------------------------------	-----------------------------------------------------	---------------------------------------------------

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

<b>Does this emission unit combust fuel?</b> ___ 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 = 20 MMscf/day
  - Maximum annual wet gas usage = 7,300 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)	5.23	22.92
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.08	0.35
Ethylbenzene	0.05	0.20
n-Hexane	0.05	0.20
Toluene	0.38	1.68
Xylenes	1.52	6.67
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Emission rates for the dehydration unit were obtained from GRI CYLCalc 4.0 with a 95% destruction efficiency from the thermal oxidizer. A safety factor of 20% is included in the total.</p>		

**Applicable Requirements**

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

- 45 CSR 13 – The maximum wet natural gas shall not exceed 20 MMscf/day or 7,300 MMscf/year (TV 5.1.2; R13-2614 4.1.2)
- 45 CSR 13 – Maximum emission limits (TV 5.1.3.a; R13-2614 4.1.3.a)
- 40 CFR 63.764(d) – Compliance with the applicable requirements of 40 CFR Part 63 Subpart HH is required upon initial start-up (TV 5.1.3.c; R13-2614 4.1.3.c)
- 45 CSR 13 – 40 CFR 63 Subpart HH Benzene exemption requirements (TV 5.1.3.d; R13-2614 4.1.3.d)

\_\_\_\_ 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 - Compliance with TV 5.1.2 will be demonstrated by monitoring daily, monthly, and rolling 12-month records of wet gas throughput (TV 5.2.1; R13-2614 4.2.1)
- 45 CSR 13/34 and 40 CFR 63.772(b) – Installation of a monitoring instrument that directly measures natural gas flowrate to the dehydration unit (TV 5.2.8; R13-2614 4.2.8)
- 45 CSR 13/34 and 40 CFR 63.772(b) – Emissions shall be determined based on GRI- GYLCalc 3.0 or higher (TV 5.2.8 and 5.3.2; R13-2614 4.2.8 and 4.3.2)
- 45 CSR 13/34 and 40 CFR 63.774(d)(1) – Records of the benzene exemption (actual annual average natural gas throughput and benzene emissions) (TV 5.4.1; R13-2614 4.4.4)

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> EG01	<b>Emission unit name:</b> Emergency Generator	<b>List any control devices associated with this emission unit:</b> C1 (catalyst)
-----------------------------------------	---------------------------------------------------	--------------------------------------------------------------------------------------

**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> GM8.1L	<b>Serial number:</b> F110226740
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<b>Construction date:</b> 2011	<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 scf/hr	<b>Maximum Annual Throughput:</b> 0.83 MMscf/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> 0.49 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 scf/hr
  - Maximum annual fuel usage = 0.83 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)	0.39	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> )	< 0.01	< 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)	0.19	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	0.01	< 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 based on manufacturer specs.</li> <li>- PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, and HAP emission factors based on AP-42 Section 3.2, Table 3.2-3.</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 – Operate and maintain according to manufacturer (G60-C034, 5.1.1)
- 45 CSR 13 – Emission limits (G60-C034, 5.1.2)
- 45 CSR 13 – Maximum fuel consumption (G60-C034, 5.1.3)
- 40 CFR Part 60 Subpart JJJJ – NSPS emission limits (G60-C034, 8.2.5)
- 40 CFR Part 60 Subpart JJJJ – NSPS emergency definition; limitation on maintenance and readiness testing to 100 hrs/yr (G60-C034, 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 – Record hours of operation and fuel consumption on a monthly basis; keep records for 5 years (G60-C034, 5.4.1)
- 40 CFR Part 60 Subpart JJJJ – Purchase a certified engine to meet NSPS emission limits (G60-C034, 8.4.1)
- 40 CFR Part 60 Subpart JJJJ – Install non-resettable hour meter to demonstrate compliance with 7.1.4 (G60-C034, 8.3.8)
- 40 CFR Part 60 Subpart JJJJ – Comply with all applicable monitoring, reports, and recordkeeping requirements (G60-C034, 8.6.1)
- 40 CFR Part 63 Subpart ZZZZ – Compliance with NSPS Subpart JJJJ shows compliance with NESHAP Subpart ZZZZ (TV 7.1.1)

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> Emergency Generator	<b>List any control devices associated with this emission unit:</b> C2 (catalyst)
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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> GM8.1L	<b>Serial number:</b> F110226741
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<b>Construction date:</b> 2011	<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 scf/hr	<b>Maximum Annual Throughput:</b> 0.83 MMscf/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> 0.49 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 scf/hr
  - Maximum annual fuel usage = 0.83 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)	0.39	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> )	< 0.01	< 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)	0.19	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	0.01	< 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 based on manufacturer specs.</li> <li>- PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, and HAP emission factors based on AP-42 Section 3.2, Table 3.2-3.</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 – Operate and maintain according to manufacturer (G60-C034, 5.1.1)
- 45 CSR 13 – Emission limits (G60-C034, 5.1.2)
- 45 CSR 13 – Maximum fuel consumption (G60-C034, 5.1.3)
- 40 CFR Part 60 Subpart JJJJ – NSPS emission limits (G60-C034, 8.2.5)
- 40 CFR Part 60 Subpart JJJJ – NSPS emergency definition; limitation on maintenance and readiness testing to 100 hrs/yr (G60-C034, 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 – Record hours of operation and fuel consumption on a monthly basis; keep records for 5 years (G60-C034, 5.4.1)
- 40 CFR Part 60 Subpart JJJJ – Purchase a certified engine to meet NSPS emission limits (G60-C034, 8.4.1)
- 40 CFR Part 60 Subpart JJJJ – Install non-resettable hour meter to demonstrate compliance with 7.1.4 (G60-C034, 8.3.8)
- 40 CFR Part 60 Subpart JJJJ – Comply with all applicable monitoring, reports, and recordkeeping requirements (G60-C034, 8.6.1)
- 40 CFR Part 63 Subpart ZZZZ – Compliance with NSPS Subpart JJJJ shows compliance with NESHAP Subpart ZZZZ (TV 7.1.1)

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

Natural gas-fired reciprocating engine/integral compressor

<b>Manufacturer:</b> Cooper	<b>Model number:</b> GMV-10TF	<b>Serial number:</b> 42223
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<b>Construction date:</b> 1977	<b>Installation date:</b> 1977	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
1100 hp

<b>Maximum Hourly Throughput:</b> 0.0092 MMscf/hr	<b>Maximum Annual Throughput:</b> 80.94 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> 1100 hp	<b>Type and Btu/hr rating of burners:</b> 8,400 Btu/hp-hr 0.0092 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 = 0.0092 MMscf/hr
  - Maximum annual fuel usage = 80.94 MMscf/yr

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

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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	7.28	31.87
Nitrogen Oxides (NO <sub>x</sub> )	41.47	181.63
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.35	1.55
Particulate Matter (PM <sub>10</sub> )	0.35	1.55
Total Particulate Matter (TSP)	0.45	1.96
Sulfur Dioxide (SO <sub>2</sub> )	0.01	0.02
Volatile Organic Compounds (VOC)	5.58	24.43
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.07	0.31
Acrolein	0.07	0.31
Benzene	0.02	0.08
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.51	2.23
Hexane	< 0.01	0.02
Toluene	0.01	0.04
Xylene	< 0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <ul style="list-style-type: none"> <li>- CO, NO<sub>x</sub>, and VOC emission rates based on manufacturer specs.</li> <li>- PM<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 6.1.2)
- 40 CFR Part 63 Subpart ZZZZ – NESHAP operating requirements (TV 6.1.2.a. and b.)
- 40 CFR Part 63 Subpart ZZZZ – NESHAP continuous compliance requirements (TV 6.1.5)
- 40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions (TV 6.1.6)

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

- 40 CFR Part 63 Subpart ZZZZ – Change oil and filter, inspect spark plugs, and inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, or utilize an oil analysis program (TV 6.1.2 and 6.2.1.e)
- 40 CFR Part 63 Subpart ZZZZ – Comply with all applicable general requirements/provisions (TV 6.1.6)
- 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 6.2.1.c.)
- 40 CFR Part 63 Subpart ZZZZ – Comply with all applicable monitoring and recordkeeping requirements (TV 6.2 and 6.4)
- 40 CFR Part 63 Subpart ZZZZ – Keep records of maintenance conducted on the RICE (TV 6.4.4)

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> 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> Ingersoll Rand	<b>Model number:</b> 103KVG-HL	<b>Serial number:</b> 103HL417
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<b>Construction date:</b> 1977	<b>Installation date:</b> 1977	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
 1000 hp

<b>Maximum Hourly Throughput:</b> 0.0082 MMscf/hr	<b>Maximum Annual Throughput:</b> 71.83 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> 1000 hp	<b>Type and Btu/hr rating of burners:</b> 8,200 Btu/hp-hr 0.0082 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 = 0.0082 MMscf/hr
  - Maximum annual fuel usage = 71.83 MMscf/yr

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

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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	23.35	102.26
Nitrogen Oxides (NO <sub>x</sub> )	29.74	130.24
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.08	0.34
Particulate Matter (PM <sub>10</sub> )	0.08	0.34
Total Particulate Matter (TSP)	0.16	0.70
Sulfur Dioxide (SO <sub>2</sub> )	< 0.01	0.02
Volatile Organic Compounds (VOC)	4.71	20.65
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.02	0.10
Acrolein	0.02	0.09
Benzene	0.01	0.06
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.17	0.74
Toluene	< 0.01	0.02
Xylene	< 0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <ul style="list-style-type: none"> <li>- CO, NO<sub>x</sub>, and VOC emission rates based on manufacturer specs.</li> <li>- PM<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.

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

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

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

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

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

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

## ATTACHMENT E - Emission Unit Form

**Emission Unit Description**

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

Natural gas-fired reciprocating engine/integral compressor

<b>Manufacturer:</b> Ingersoll Rand	<b>Model number:</b> 103KVG-HL	<b>Serial number:</b> 103HL416
<b>Construction date:</b> 1977	<b>Installation date:</b> 1977	<b>Modification date(s):</b> N/A

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
1000 hp

<b>Maximum Hourly Throughput:</b> 0.0082 MMscf/hr	<b>Maximum Annual Throughput:</b> 71.83 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> 1000 hp	<b>Type and Btu/hr rating of burners:</b> 8,200 Btu/hp-hr 0.0082 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 = 0.0082 MMscf/hr  
 - Maximum annual fuel usage = 71.83 MMscf/yr

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

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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	23.35	102.26
Nitrogen Oxides (NO <sub>x</sub> )	29.74	130.24
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.08	0.34
Particulate Matter (PM <sub>10</sub> )	0.08	0.34
Total Particulate Matter (TSP)	0.16	0.70
Sulfur Dioxide (SO <sub>2</sub> )	< 0.01	0.02
Volatile Organic Compounds (VOC)	4.71	20.65
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.02	0.10
Acrolein	0.02	0.09
Benzene	0.01	0.06
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.17	0.74
Toluene	< 0.01	0.02
Xylene	< 0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <ul style="list-style-type: none"> <li>- CO, NO<sub>x</sub>, and VOC emission rates based on manufacturer specs.</li> <li>- PM<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.

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

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

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

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

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

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

## ATTACHMENT E - Emission Unit Form

***Emission Unit Description***

<b>Emission unit ID number:</b> 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> Inegral	<b>Model number:</b>	<b>Serial number:</b>
<b>Construction date:</b> ~ 2016	<b>Installation date:</b> ~ 2016	<b>Modification date(s):</b> N/A

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

0.75 MMBtu/hr

<b>Maximum Hourly Throughput:</b> 0.001 MMscf/hr	<b>Maximum Annual Throughput:</b> 9.67 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> 0.75 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 = 0.001 MMscf/hr
  - Maximum annual fuel usage = 9.67 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)	0.09	0.41
Nitrogen Oxides (NO <sub>x</sub> )	0.11	0.48
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	0.04
Sulfur Dioxide (SO <sub>2</sub> )	< 0.01	< 0.01
Volatile Organic Compounds (VOC)	0.01	0.03
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> and CO emission factors from AP-42, Section 1.4, Natural Gas Combustion, Table 1.4-1, 7/98</li> <li>- VOC, 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 – The reboiler shall not exceed 0.75 MMBtu/hr and only burn natural gas (TV 5.1.4.a; R13-2614 4.1.4.a)  
45 CSR 13 – Emission limits (TV 5.1.4.b; R13-2614 4.1.4.b)  
45 CSR 13 and 45 CSR 2-3.1 – Opacity limit of 10% on a six minute block average (TV 5.1.4.d; R13-2614 4.1.4.d)

\_\_\_\_ 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 5.1.4 is demonstrated by combusting natural gas (TV 5.1.4.a; R13-2614 4.1.4.a)  
45 CSR 13 – Compliance with 5.1.4.d shall be demonstrated by a Method 9, if requested (TV 5.2.2; R13-2614 4.2.2 and 4.3.3)  
45 CSR 13 – If Method 9 is requested and deviations are discovered, report within 10 days (TV 5.5.1; R13-2614 4.5.1)

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> 2C	<b>Emission unit name:</b> 2C Thermal Oxidizer	<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 Thermal Oxidizer

<b>Manufacturer:</b> Questor	<b>Model number:</b> Q250	<b>Serial number:</b>
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<b>Construction date:</b> ~ 2016	<b>Installation date:</b> ~ 2016	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
Combustor Rating: 4.78 MMBtu/hr  
Pilot Burner: 60,000 Btu/hr

<b>Maximum Hourly Throughput:</b> Fuel to pilot flame: 60 scf/hr	<b>Maximum Annual Throughput:</b> Fuel to pilot flame: 0.526 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: 4.78 MMBtu/hr Pilot Burner: 60,000 Btu/hr	<b>Type and Btu/hr rating of burners:</b> Combustor Rating: 4.78 MMBtu/hr Pilot Burner: 60,000 Btu/hr
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Natural gas

- Maximum hourly fuel to pilot throughput = 60 scf/hr
- Maximum annual fuel to pilot throughput = 0.526 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)	1.49	6.51
Nitrogen Oxides (NO <sub>x</sub> )	0.33	1.45
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	0.04	0.16
Particulate Matter (PM <sub>10</sub> )	0.04	0.16
Total Particulate Matter (TSP)	0.04	0.16
Sulfur Dioxide (SO <sub>2</sub> )	< 0.01	0.01
Volatile Organic Compounds (VOC)	< 0.01	< 0.01
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> <p>Emissions were added together for the pilot and combustor:</p> <ul style="list-style-type: none"> <li>- Emission factors from AP-42 Section 1.4 "Natural Gas Combustion" Tables 1.4-1, 1.4-2. Used for Pilot.</li> <li>- Emission factors from AP-42 Section 13.5 "Industrial Flares" Tables 13.5-1, 13.5-2. Used for Combustor.</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 G**

Air Pollution Control Device Form

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> 2C	<b>List all emission units associated with this control device.</b> DEHY02, RBR02
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<b>Manufacturer:</b> QTI	<b>Model number:</b> Q250	<b>Installation date:</b> ~ 2016
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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 checked="" type="checkbox"/> Thermal Incinerator	<input 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.).**

QTI dehydration unit controlled thermal oxidizer  
4.78 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 (R13-2614B) 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 13 – Emission limits (TV 5.1.5.a, R13-2614B 4.1.5.a)
- 45 CSR 13 – Design capacity (TV 5.1.5.b, R13-2614B 4.1.5.b)
- 45 CSR 13 – The pilot flame shall be present at all times when the thermal oxidizer is operating (TV 5.1.5.c, R13-2614B 4.1.5.c)
- 45 CSR 13 – Visible emissions (TV 5.1.5.d, R13-2614B 4.1.5.d)
- 45 CSR 13 – The thermal oxidizer shall be operated at all times when emissions may be vented to it (TV 5.1.5.e, R13-2614B 4.1.5.e)
- 45 CSR 13 – Operation and design of the thermal oxidizer to meet a 95.0% control (TV 5.1.5.f, R13-2614B 4.1.5.f)
- 45 CSR 13 – Operate and maintain the thermal oxidizer according to manufacturer specification (TV 5.1.5.g, R13-2614B 4.1.5.g)
- 45 CSR 6-4.1 – Particulate matter emission limit (TV 5.1.5.h, R13-2614B 4.1.5.h)
- 45 CSR 6-4.3, 4, 5 – Incinerator operating requirements (TV 5.1.5.h, R13-2614B 4.1.5.h)
- 45 CSR 6-4.6 – Incinerator odor prevention requirements (TV 5.1.5.h, R13-2614B 4.1.5.h)
- 45 CSR 13 – Closed vent requirements (TV 5.1.6, R13-2614B 4.1.6)

**Monitoring**

- 45 CSR 13 – Compliance with 5.1.5.c shall be demonstrated by continuously monitoring using a thermocouple to detect a presence of a flame (TV 5.2.3, R13-2614B 4.2.3)
- 45 CSR 13 – Compliance with 5.1.5.d shall be demonstrated by an initial Method 22 (TV 5.2.5, R13-2614B 4.2.5)
- 45 CSR 13 – Compliance with 5.1.6 shall be demonstrated by an initial AVO and annual AVOs (TV 5.2.6, R13-2614B 4.2.6)

**Testing**

- 45 CSR 13 – Testing if required (TV 5.3.1, R13-2614B 4.3.1)
- 45 CSR 13 – Testing for particulate matter loading shall be conducted if required (TV 5.3.3, R13-2614B 4.3.3)

**Recordkeeping**

- 45 CSR 13 – Records of initial/annual inspections (TV 5.2.7, R13-2614B 4.2.7)

**Reporting**

- 45 CSR 13 – Reporting of deviations of visible emissions requirements (TV 5.5.1, R13-2614B 4.5.1)
- 45 CSR 13 – Reporting of any time the thermal oxidizer is not operating when emissions are vented to it (TV 5.5.3, R13-2614B 4.5.3)