



Cabot Oil & Gas Corporation

# **Cranberry Pipeline Corporation**

**G35-A Class II Administrative Update Permit  
Application**

**Poca T Natural Gas Compressor Station**

Newhall, West Virginia



**Prepared By:**

**ENVIRONMENTAL RESOURCES MANAGEMENT, Inc.  
Hurricane, West Virginia  
September 2015**



Cabot Oil & Gas Corporation

September 24, 2015

Mr. William F. Durham, Director  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street, SE  
Charleston, West Virginia, 25304

**RE: G35-A Class II Administrative Update  
Poca T Natural Gas Compressor Station  
Cranberry Pipeline Corporation**

Dear Director Durham:

Cranberry Pipeline Corporation (Cranberry) is pleased to submit the enclosed application for a General Permit G35-A Class II Administrative Update for the Poca T Natural Gas Compressor Station near Newhall in McDowell County, West Virginia. The original hard copy and two (2) CD-ROMs of the complete application package are enclosed.

Cranberry requests that the WVDAQ issue this administrative update to the existing G35-A, if possible. Based upon our current understanding of the timetable for the issuance of the updated G35-C general permit program, Cranberry would prefer to be issued a permit under the existing G35-A program to prevent any potential delay.

A check for the application fee in the amount of \$300.00 made payable to the WVDEP – Division of Air Quality is also included with this package.

A public notice for the proposed project will be published as soon as possible. Cranberry will forward the original Affidavit of Publication to your attention once it is received from the publisher.

If you have any questions about the information submitted or if you would like to discuss this project, please do not hesitate to contact me at (304) 347-1642.

Sincerely,

Randy Spencer  
Safety and Environmental Health Manger

cc: Grant Morgan, ERM – Grant.morgan@erm.com

## **INTRODUCTION**

Cranberry Pipeline Corporation (Cranberry) submits this G35-A Class II Administrative Update Permit Application to the WVDEP's Department of Air Quality for the Poca T natural gas compressor station located in McDowell County, West Virginia. This application addresses the operational activities associated with the compression of natural gas at the Poca T facility.

## **FACILITY DESCRIPTION**

The Poca T natural gas production site operates in McDowell County, WV and consists of one (1) natural gas compressor engine, one (1) dehydration unit and associated 0.25 mmBtu/hr reboiler, and one (1) pipeline fluids tank. The natural gas will be transported on-site via pipeline, compressed, and dehydrated for delivery to the gas sales line.

Cranberry seeks authority to correct the burner rating of the glycol dehydrator reboiler (RBV-1) and remove the TEG Storage Tank (T02) currently permitted in G35-A090. The other permitted emission units, ENG-1, RSV-1, and T01, are not being amended in this update.

A process flow diagram is included in this application in Attachment D.

## **REGULATORY DISCUSSION**

This section outlines the State and Federal air quality regulations that could reasonably be expected to apply to the Poca T Compressor Station and makes an applicability determination for each regulation based on activities conducted at the site and the emissions of regulated air pollutants. This review is presented to supplement and/or add clarification to the information provided in the WVDEP G35-A permit application forms.

The West Virginia State Regulations address applicable state (i.e. State Implementation Plan) rules as well as federal regulations, including Prevention of Significant Deterioration or Nonattainment New Source Review Preconstruction Permitting, Title V, New Source Performance Standards, and National Emission Standards for Hazardous Air Pollutants. The regulatory requirements in reference to Poca T Compressor Station are described in detail in the below section.

## WEST VIRGINIA STATE AIR REGULATIONS

*45 CSR 02 – To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers*

The reboiler is an indirect heat exchanger that combust natural gas. Such units are subject to 10% opacity as a six-minute block average limitation, but are exempt from most other requirements in the rule aside from discretionary testing requirements.

*45 CSR 04 – To Prevent and Control the Discharge of Air Pollutants into the Air Which Causes or Contributes to an Objectionable Odor*

Operations conducted at the Poca T Compressor station are subject to this requirement. Based on the nature of the process at this station, the presence of objectionable odors is unlikely.

*45 CSR 06 – Control of Air Pollution from the Combustion of Refuse*

The Poca T Compressor Station does not combust refuse.

*45 CSR 10 – To Prevent and Control Air Pollution from the Emission of Sulfur Oxides*

Natural gas combustion devices will be operated in accordance with the sulfur dioxide concentration limitation. Pipeline quality natural gas will be used at the Poca T facility.

*45 CSR 13 – Permits for Construction, Modification, Relocation, and Operation of Stationary Sources of Air Pollutants*

This G35-A permit application is being submitted for the operational activities associated with Cranberry's production of natural gas.

*45 CSR 14 / 45 CSR 19 – Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration / Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution which Cause or Contributed to Non-attainment*

Federal construction permitting programs regulate new and modified sources of attainment pollutants. The G35-A applicability criteria exclude facilities that meet the definition of a major source, as defined in 45 CSR 19, from being eligible for the general permit.

Operation of equipment at the Poca T Compressor Station will not exceed major source emission thresholds established by these permitting programs. Cranberry will monitor future construction and modification activities at the site closely

and will compare future increase in emissions with major source thresholds to ensure these activities will not trigger either program.

*45 CSR 16 - Standards of Performance for New Stationary Sources (NSPS)*

45 CSR 16 applies to registrants that are subject to NSPS requirements described in more detail in the Federal Regulations section. There are no applicable requirements of NSPS in this G35-A general permit.

*45 CSR 30 – Requirements for Operating Permits*

45 CSR 30 applies to the requirements of the federal Title V operating permit program (40 CFR 70). The major source thresholds with respect to the West Virginia Title V operating permit program regulations are 10 tons per year (tpy) of a single HAP, 25 tpy of any combination of HAP, and 100 tpy of other regulated pollutants.

The potential emissions of regulated pollutants are below the corresponding threshold(s) at this facility. The facility is not major source with respect to the Title V operating permit program.

*45 CSR 34 – National Emission Standards for Hazardous Air Pollutants (NESHAP)*

45 CSR 34 applies to registrants that are subject to NESHAP requirements described in more detail in the Federal Regulations section. No applicable requirements of NESHAPs required in this G35-A general permit.

## **FEDERAL REGULATIONS**

The following NSPS included in the G35-A permit are not applicable to the Poca T facility:

*40 CFR 60, Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines)*

Subpart JJJJ established standards and compliance schedules for the control of volatile organic compounds (VOC), Nitrogen Oxides (NO<sub>x</sub>), and Carbon Monoxide (CO) emissions from affected facilities that commence construction, modification, or reconstruction after June 12, 2006.

The natural gas compressor engine that will be installed at the Poca T Compressor Station is not subject to the requirements of this Rule. The compressor engine is a spark ignition internal combustion engine that was manufactured prior to 2005. Therefore, these requirements do not apply.

No additional NSPS are currently applicable to this facility.

NESHAP ZZZZ is applicable to the existing compressor engine, which is not included in this administrative update.



WEST VIRGINIA  
 DEPARTMENT OF ENVIRONMENTAL PROTECTION  
 DIVISION OF AIR QUALITY  
 601 57<sup>th</sup> Street, SE  
 Charleston, WV 25304  
 Phone: (304) 926-0475 • www.dep.wv.gov/daq

**APPLICATION FOR GENERAL PERMIT REGISTRATION**  
 CONSTRUCT, MODIFY, RELOCATE OR ADMINISTRATIVELY UPDATE  
 A STATIONARY SOURCE OF AIR POLLUTANTS

- CONSTRUCTION     MODIFICATION     RELOCATION     CLASS I ADMINISTRATIVE UPDATE  
 CLASS II ADMINISTRATIVE UPDATE

**CHECK WHICH TYPE OF GENERAL PERMIT REGISTRATION YOU ARE APPLYING FOR:**

- |  |  |
|--|--|
| <input type="checkbox"/> <b>G10-D</b> – Coal Preparation and Handling  | <input type="checkbox"/> <b>G40-C</b> – Nonmetallic Minerals Processing                  |
| <input type="checkbox"/> <b>G20-B</b> – Hot Mix Asphalt  | <input type="checkbox"/> <b>G50-B</b> – Concrete Batch                                   |
| <input type="checkbox"/> <b>G30-D</b> – Natural Gas Compressor Stations  | <input type="checkbox"/> <b>G60-C</b> - Class II Emergency Generator                     |
| <input type="checkbox"/> <b>G33-A</b> – Spark Ignition Internal Combustion Engines                                 | <input type="checkbox"/> <b>G65-C</b> – Class I Emergency Generator                      |
| <input checked="" type="checkbox"/> <b>G35-A</b> – Natural Gas Compressor Stations (Flare/Glycol Dehydration Unit) | <input type="checkbox"/> <b>G70-A</b> – Class II Oil and Natural Gas Production Facility |

**SECTION I. GENERAL INFORMATION**

1. Name of applicant (as registered with the WV Secretary of State's Office): <b>Cranberry Pipeline Corporation</b>		2. Federal Employer ID No. (FEIN): <b>042989934</b>	
3. Applicant's mailing address: <b>900 Lee Street East, Suite 1500 Charleston, WV 25301</b>		4. Applicant's physical address: <b>Newhall, McDowell County, WV</b>	
5. If applicant is a subsidiary corporation, please provide the name of parent corporation:			
6. <b>WV BUSINESS REGISTRATION.</b> Is the applicant a resident of the State of West Virginia? <input checked="" type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b> - IF <b>YES</b> , provide a copy of the Certificate of <b>Incorporation/ Organization / Limited Partnership</b> (one page) including any name change amendments or other Business Registration Certificate as <b>Attachment A</b> . - IF <b>NO</b> , provide a copy of the <b>Certificate of Authority / Authority of LLC / Registration</b> (one page) including any name change amendments or other Business Certificate as <b>Attachment A</b> .			

**SECTION II. FACILITY INFORMATION**

7. Type of plant or facility (stationary source) to be constructed, modified, relocated or administratively updated (e.g., coal preparation plant, primary crusher, etc.): <b>Class II Oil and Natural Gas Production Facility</b>	8a. Standard Industrial Classification Classification (SIC) code: <b>1311</b>	AND	8b. North American Industry System (NAICS) code: <b>211111</b>
9. DAQ Plant ID No. (for existing facilities only): <b>047-00071</b>	10. List all current 45CSR13 and other General Permit numbers associated with this process (for existing facilities only): <b>G35-A090</b>		

**A: PRIMARY OPERATING SITE INFORMATION**

<p>11A. Facility name of primary operating site:</p> <p><b>Poca T</b></p>	<p>12A. Address of primary operating site:</p> <p>Mailing: <b>900 Lee Street East, Suite 1500 Charleston, WV 25301</b></p> <p>Physical: <b>Newhall, McDowell County, WV</b></p>	
<p>13A. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? <span style="float:right"><input checked="" type="checkbox"/> <b>YES</b>    <input type="checkbox"/> <b>NO</b></span></p> <p>- IF <b>YES</b>, please explain: <b>The applicant leases the proposed site.</b></p> <p>- IF <b>NO</b>, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.</p>		
<p>14A. <input type="checkbox"/> For <b>Modifications or Administrative Updates</b> at an existing facility, please provide directions to the present location of the facility from the nearest state road;</p> <p>- For Construction or Relocation permits, please provide directions to the proposed new site location from the nearest state road. Include a <b>MAP</b> as <b>Attachment F</b>.</p>		
<p>15A. Nearest city or town:</p> <p><b>Newhall</b></p>	<p>16A. County:</p> <p><b>McDowell</b></p>	<p>17A. UTM Coordinates:</p> <p>Northing (KM): <b>4,125.731</b></p> <p>Easting (KM): <b>446.595</b></p> <p>Zone: <b>17</b></p>
<p>18A. Briefly describe the proposed new operation or change (s) to the facility:</p> <p><b>Cranberry Pipeline proposes to update the natural gas reboiler from 0.18 mmBtu/hr to 0.25 mmBtu/hr. This equipment was incorrectly permitted in G35-A090. Cranberry also seeks to remove the TEG storage tank from the permit. The removal of the TEG tank is an after-the-fact update to the permit.</b></p>		<p>19A. Latitude &amp; Longitude Coordinates (NAD83, Decimal Degrees to 5 digits):</p> <p>Latitude: <b>37.27665</b></p> <p>Longitude: <b>-81.60223</b></p>

**SECTION III. ATTACHMENTS AND SUPPORTING DOCUMENTS**



23. Include a check payable to WVDEP – Division of Air Quality with the appropriate **application fee** (per 45CSR22 and 45CSR13).

24. Include a **Table of Contents** as the first page of your application package.

All of the required forms and additional information can be found under the Permitting Section (General Permits) of DAQ's website, or requested by phone.

25. Please check all attachments included with this permit application. Please refer to the appropriate reference document for an explanation of the attachments listed below.

- ATTACHMENT A : CURRENT BUSINESS CERTIFICATE
- ATTACHMENT B: PROCESS DESCRIPTION
- ATTACHMENT C: DESCRIPTION OF FUGITIVE EMISSIONS
- ATTACHMENT D: PROCESS FLOW DIAGRAM
- ATTACHMENT E: PLOT PLAN
- ATTACHMENT F: AREA MAP
- ATTACHMENT G: EQUIPMENT DATA SHEETS AND REGISTRATION SECTION APPLICABILITY FORM
- ATTACHMENT H: AIR POLLUTION CONTROL DEVICE SHEETS (**NOT APPLICABLE**)
- ATTACHMENT I: EMISSIONS CALCULATIONS
- ATTACHMENT J: CLASS I LEGAL ADVERTISEMENT
- ATTACHMENT K: ELECTRONIC SUBMITTAL (**NOT APPLICABLE**)
- ATTACHMENT L: GENERAL PERMIT REGISTRATION APPLICATION FEE
- ATTACHMENT M: SITING CRITERIA WAIVER (**NOT APPLICABLE**)
- ATTACHMENT N: MATERIAL SAFETY DATA SHEETS (MSDS) (**NOT APPLICABLE**)
- ATTACHMENT O: EMISSIONS SUMMARY SHEETS
- OTHER SUPPORTING DOCUMENTATION NOT DESCRIBED ABOVE (Equipment Drawings, Aggregation Discussion, etc.)  
**(NOT APPLICABLE)**

Please mail an original and two copies of the complete General Permit Registration Application with the signature(s) to the DAQ Permitting Section, at the address shown on the front page of this application. Please **DO NOT** fax permit applications. For questions regarding applications or West Virginia Air Pollution Rules and Regulations, please refer to the website shown on the front page of the application or call the phone number also provided on the front page of the application.

SECTION IV. CERTIFICATION OF INFORMATION

This General Permit Registration Application shall be signed below by a Responsible Official. A Responsible Official is a President, Vice President, Secretary, Treasurer, General Partner, General Manager, a member of a Board of Directors, or Owner, depending on business structure. A business may certify an Authorized Representative who shall have authority to bind the Corporation, Partnership, Limited Liability Company, Association, Joint Venture or Sole Proprietorship. Required records of daily throughput, hours of operation and maintenance, general correspondence, Emission Inventory, Certified Emission Statement, compliance certifications and all required notifications must be signed by a Responsible Official or an Authorized Representative. If a business wishes to certify an Authorized Representative, the official agreement below shall be checked off and the appropriate names and signatures entered. Any administratively incomplete or improperly signed or unsigned Registration Application will be returned to the applicant.

FOR A CORPORATION (domestic or foreign)

I certify that I am a President, Vice President, Secretary, Treasurer or in charge of a principal business function of the corporation

FOR A PARTNERSHIP

I certify that I am a General Partner

FOR A LIMITED LIABILITY COMPANY

I certify that I am a General Partner or General Manager

FOR AN ASSOCIATION

I certify that I am the President or a member of the Board of Directors

FOR A JOINT VENTURE

I certify that I am the President, General Partner or General Manager

FOR A SOLE PROPRIETORSHIP

I certify that I am the Owner and Proprietor

I hereby certify that (please print or type) RANDY SPENCER is an Authorized Representative and in that capacity shall represent the interest of the business (e.g., Corporation, Partnership, Limited Liability Company, Association Joint Venture or Sole Proprietorship) and may obligate and legally bind the business. If the business changes its Authorized Representative, a Responsible Official shall notify the Director of the Office of Air Quality immediately, and/or,

I hereby certify that all information contained in this General Permit Registration Application and any supporting documents appended hereto is, to the best of my knowledge, true, accurate and complete, and that all reasonable efforts have been made to provide the most comprehensive information possible

Signature Randy Spencer Responsible Official Date 9/29/15  
(please use blue ink)

Name & Title Randy Spencer, Safety and Environmental Manager – North Region  
(please print or type)

Signature \_\_\_\_\_ Authorized Representative (if applicable) Date \_\_\_\_\_  
(please use blue ink)

Applicant's Name Cranberry Pipeline Corporation

Phone & Fax (304) 347-1642  
Phone Fax

Email: randy.spencer@cabotog.com

## Table of Contents

<b>ATTACHMENT A</b>	BUSINESS CERTIFICATE
<b>ATTACHMENT B</b>	PROCESS DESCRIPTION
<b>ATTACHMENT C</b>	DESCRIPTION OF FUGITIVE EMISSIONS
<b>ATTACHMENT D</b>	PROCESS FLOW DIAGRAM
<b>ATTACHMENT E</b>	PLOT PLAN
<b>ATTACHMENT F</b>	AREA MAP
<b>ATTACHMENT G</b>	EQUIPMENT DATA SHEETS AND REGISTRATION SECTION APPLICABILITY FORM
<b>ATTACHMENT H</b>	AIR POLLUTION CONTROL DEVICE SHEETS <b>(NOT APPLICABLE)</b>
<b>ATTACHMENT I</b>	EMISSION CALCULATIONS
<b>ATTACHMENT J</b>	CLASS I LEGAL ADVERTISEMENT
<b>ATTACHMENT K</b>	ELECTRONIC SUBMITTAL <b>(NOT APPLICABLE)</b>
<b>ATTACHMENT L</b>	GENERAL PERMIT REGISTRATION APPLICATION FEE
<b>ATTACHMENT M</b>	SITTING CRITERIA WAIVER <b>(NOT APPLICABLE)</b>
<b>ATTACHMENT N</b>	SAFETY DATA SHEETS (SDS) <b>(NOT APPLICABLE)</b>
<b>ATTACHMENT O</b>	EMISSION SUMMARY SHEETS
	OTHER SUPPORTING DOCUMENTATION NOT DESCRIBED ABOVE <b>(NOT APPLICABLE)</b>

# **ATTACHMENT A**

## **BUSINESS CERTIFICATE**

**WEST VIRGINIA  
STATE TAX DEPARTMENT  
BUSINESS REGISTRATION  
CERTIFICATE**

ISSUED TO:  
**CRANBERRY PIPELINE CORPORATION  
900 LEE ST E 1700  
CHARLESTON, WV 25301-1741**

**BUSINESS REGISTRATION ACCOUNT NUMBER 1006-3673**

This certificate is issued on: **06/1/2011**

*This certificate is issued by  
the West Virginia State Tax Commissioner  
in accordance with Chapter 11, Article 12, of the West Virginia Code.*

*The person or organization identified on this certificate is registered  
to conduct business in the State of West Virginia at the location above.*

*This certificate is not transferrable and must be displayed at the location for which issued.  
This certificate shall be permanent until cessation of the business for which the certificate of registration  
was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.*

*Change in name or change of location shall be considered a cessation of the business and a new  
certificate shall be required.*

**TRAVELING STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them.  
CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of  
this certificate displayed at every job site within West Virginia.**

atL006 v.4  
L1111698560

# **ATTACHMENT B**

## **PROCESS DESCRIPTION**

## **Attachment B**

### **Process Description**

This G35-A Class II Administrative Update permit application is being filed for Cranberry Pipeline Corporation (Cranberry), and addresses operational activities associated with the Poca T Natural Gas Compressor Station. Incoming raw gas from surrounding production well pads enters the site via underground pipeline. The compressor station operates a separator on the suction side of the compressor engine, which removes excess fluids entrained within the gas stream. In the rare event fluids are realized at the separator, these liquids are transferred to the pipeline liquid tank (T01). T01 qualifies as a tank that does not have permitted emissions under the G35-A and the operation of this tank is not being amended in anyway with the submission of this administrative update.

The compressor engine located at the Poca T compressor station is a 346 hp Ajax DPC-360 natural gas compressor engine (ENG-1). The pressurized gas stream flows through a triethylene glycol dehydration unit (RSV-1), where any fluids still entrained within the gas is removed prior to the gas entering the downstream sales pipeline.

A process flow diagram is included as Attachment D.

# **ATTACHMENT C**

## **DESCRIPTION OF FUGITIVE EMISSIONS**



## **Attachment C**

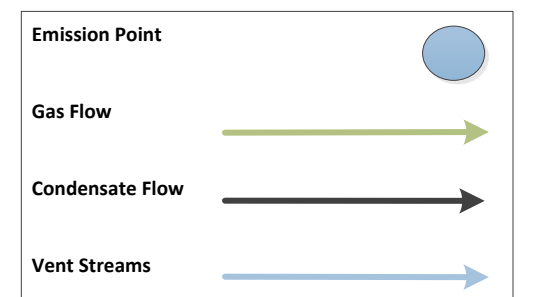
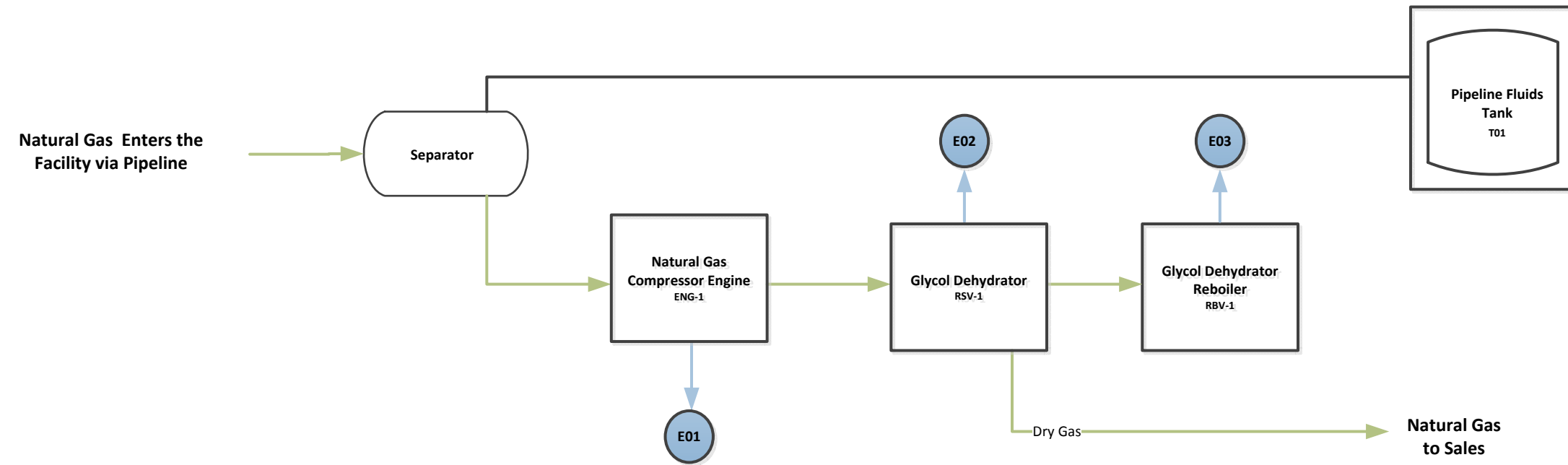
### **G35-A General Permit Description of Fugitive Emissions**

This permit application is being filed for Cranberry Pipeline Corporation and addresses operational activities associated with the Poca T natural gas production site. Fugitive emissions are not being modified with the Class II Administrative Update.

# **ATTACHMENT D**

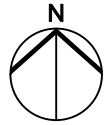
## **PROCESS FLOW DIAGRAM**

**Attachment D**  
**Poca T Natural Gas Facility**  
**Process Flow Diagram**

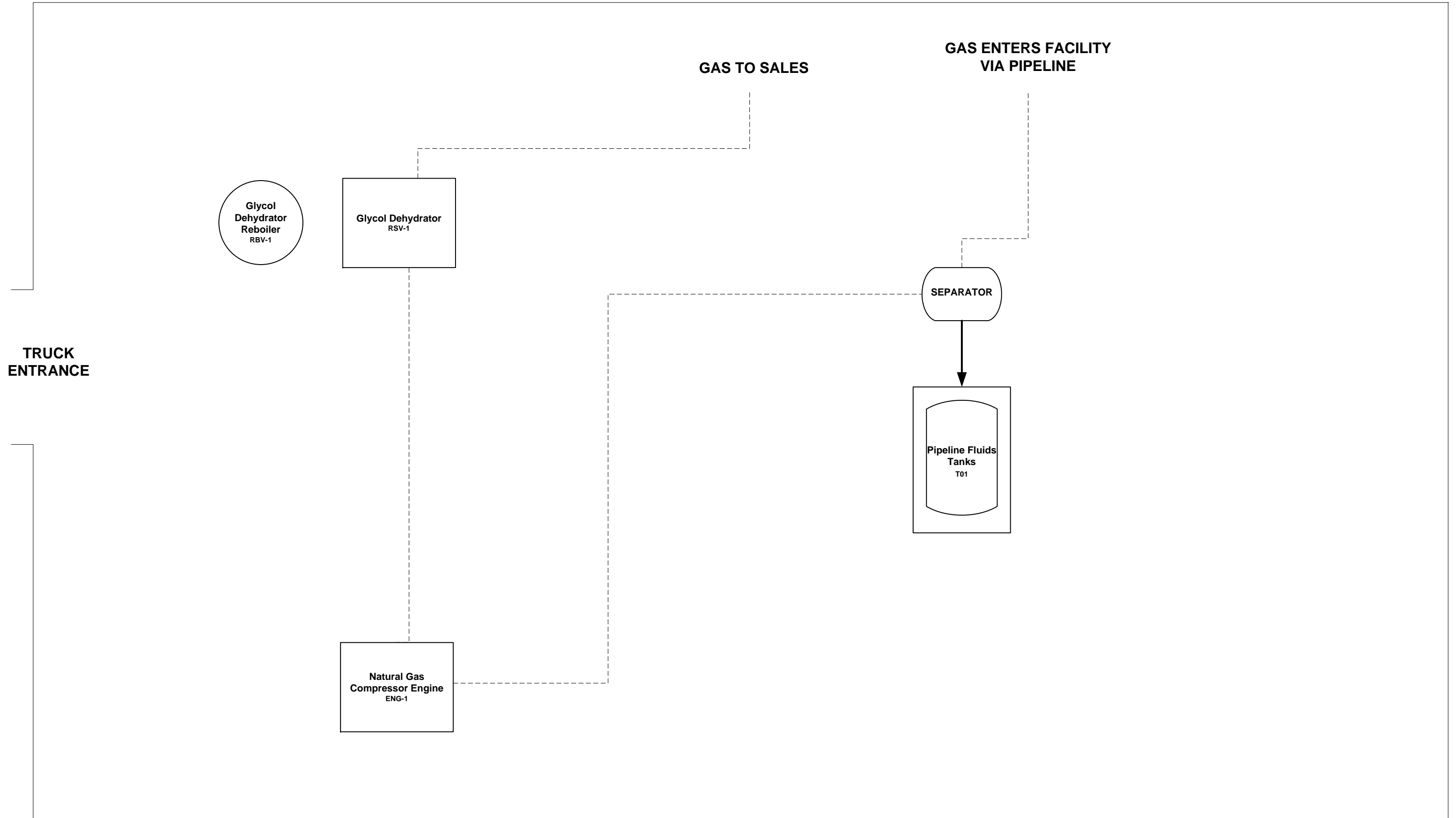


# **ATTACHMENT E**

## **PLOT PLAN**



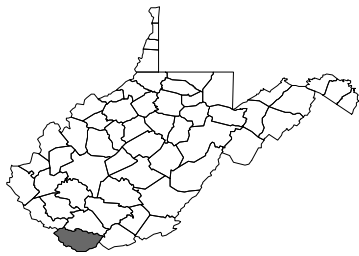
**Attachment E**  
**Plot Plan**  
**Poca T Natural Gas Production Site**



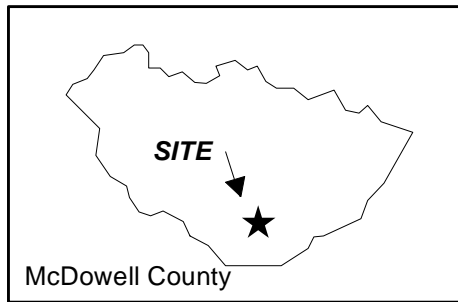
**TRUCK  
ENTRANCE**

# **ATTACHMENT F**

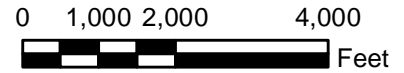
## **AREA MAP**



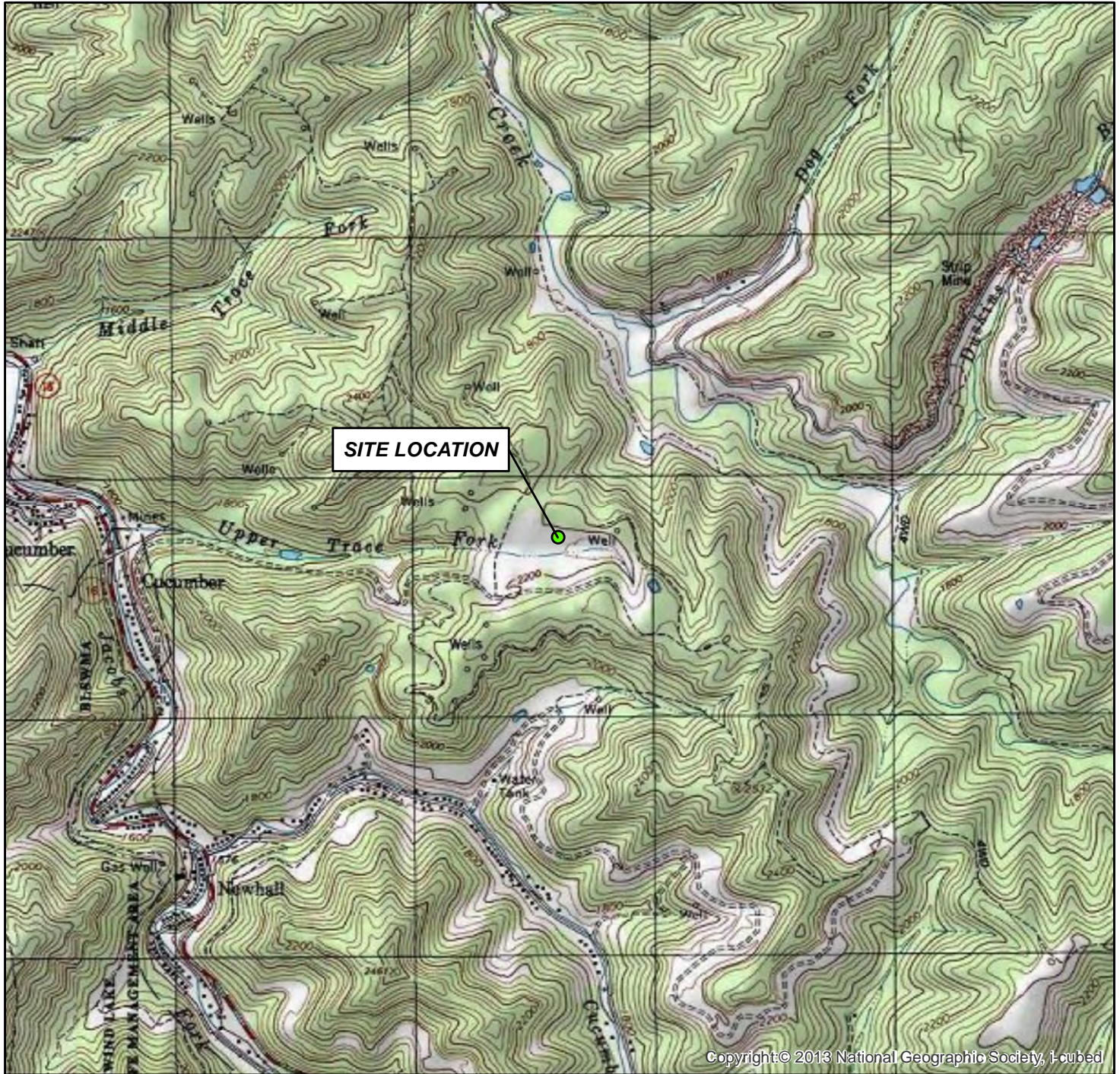
West Virginia



McDowell County



LAT. 37.276653 LON. -81.602235  
 MCDOWELL COUNTY  
 WEST VIRGINIA



Copyright © 2013 National Geographic Society, I-cubed

USGS 1:24K 7.5' Quadrangle:  
 Gary, WV

## SITE LOCATION MAP

### Cabot Oil & Gas

Poca T Compressor Station  
 Cabot Oil & Gas  
 McDowell, West Virginia

GIS Review: JS

CHK'D: JS

0317016



Drawn By:  
 SRV-9/16/15

## Environmental Resources Management

FIGURE 1

J:\GIS\Projects\SiteLocation\Map\Cabot Oil & Gas - I\XD\Site Location\_Map.mxd - 9/16/2015 SRV

# **ATTACHMENT G**

**EQUIPMENT DATA SHEETS AND REGISTRATION SECTION  
APPLICABILITY FORM**



## General Permit G35-A Registration Section Applicability Form

General Permit G35-A was developed to allow qualified registrants to seek registration for a variety of sources. These sources include internal combustion engines, boilers, reboilers, line heaters, tanks, emergency generators, dehydration units not subject to MACT standards, dehydration units not subject to MACT standards and being controlled by a flare control device, dehydration units not subject to MACT standards and being controlled by recycling the dehydration unit back to flame zone of reboiler, dehydration units not subject to MACT standards being controlled by a thermal oxidizer, and permit exemptions including the less than 1 ton/year benzene exemption, the 40CFR63 Subpart HH - Annual Average Flow of Gas Exemption (3 mmscf/day), and the 40CFR63 Subpart HHH - Annual Average Flow of Gas Exemption (10 mmscf/day). All registered facilities will be subject to Sections 1.0, 1.1, 2.0, 3.0, and 4.0.

General Permit G35-A allows the registrant to choose which sections of the permit that they wish to seek registration under. Therefore, please mark which sections that you are applying for registration under. Please keep in mind, that if this registration is approved, the issued registration will state which sections will apply to your affected facility.

Section 5	Reciprocating Internal Combustion Engines (R.I.C.E.)*	<input checked="" type="checkbox"/>
Section 6	Boilers, Reboilers, and Line Heaters	<input checked="" type="checkbox"/>
Section 7	Tanks	<input checked="" type="checkbox"/>
Section 8	Emergency Generators	<input type="checkbox"/>
Section 9	Dehydration Units Not Subject to MACT Standards	<input checked="" type="checkbox"/>
Section 10	Dehydration Units Not Subject to MACT Standards and being controlled by a flare control device	<input type="checkbox"/>
Section 11	Dehydration Units Not Subject to MACT Standards being controlled by recycling the dehydration unit back to the flame zone of the reboiler	<input type="checkbox"/>
Section 12	Dehydration Units Not Subject to MACT Standards and being controlled by a thermal oxidizer	<input type="checkbox"/>
Section 13	Permit Exemption (Less than 1 ton/year of benzene exemption)	<input checked="" type="checkbox"/>
Section 14	Permit Exemption (40CFR63 Subpart HH – Annual average flow of gas exemption (3 mmscf/day))	<input type="checkbox"/>
Section 15	Permit Exemption (40CFR63 Subpart HHH – Annual average flow of gas exemption (10 mmscf/day))	<input type="checkbox"/>
Section 16	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40CFR60 Subpart JJJJ)	<input type="checkbox"/>

**\* Affected facilities that are subject to Section 5 may also be subject to Section 16. Therefore, if the applicant is seeking registration under both sections, please select both.**

**NATURAL GAS FIRED BOILER/LINE HEATER DATA SHEET**

Source ID # <sup>1</sup>	Status <sup>2</sup>	Design Heat Input (mmBtu/hr) <sup>3</sup>	Hours of Operation (hrs/yr) <sup>4</sup>	Fuel Heating Value (Btu/scf) <sup>5</sup>
<b>RVB-1</b>	<b>EXIST</b>	<b>0.25</b>	<b>8,760</b>	<b>1,020</b>

1. Enter the appropriate Source Identification Numbers (Source ID #) for each boiler or line heater located at the compressor station. Boilers should be designated BLR-1, BLR-2, BLR-3, etc. Heaters or Line Heaters should be designated HTR-1, HTR-2, HTR-3, etc. Enter glycol dehydration unit Reboiler Vent data on the *Glycol Dehydration Unit Data Sheet*.
2. Enter the Status for each boiler or line heater using the following:  

EXIST	Existing Equipment	NEW	Installation of New Equipment
REM	Equipment Removed		
3. Enter boiler or line heater design heat input in mmBtu/hr.
4. Enter the annual hours of operation in hours/year for each boiler or line heater.
5. Enter the fuel heating value in Btu/standard cubic foot.

**STORAGE TANK DATA SHEET**

Source ID # <sup>1</sup>	Status <sup>2</sup>	Content <sup>3</sup>	Volume <sup>4</sup>	Dia <sup>5</sup>	Throughput <sup>6</sup>	Orientation <sup>7</sup>	Liquid Height <sup>8</sup>
<b>T02</b>	<b>REM</b>	<b>TEG Storage Tank</b>	<b>500 gal</b>	<b>3</b>	<b>1,500</b>	<b>VERT</b>	<b>2</b>

1. Enter the appropriate Source Identification Numbers (Source ID #) for each storage tank located at the compressor station. Tanks should be designated T01, T02, T03, etc.
2. Enter storage tank Status using the following:  

EXIST	Existing Equipment	NEW	Installation of New Equipment
REM	Equipment Removed		
3. Enter storage tank content such as condensate, pipeline liquids, glycol (DEG or TEG), lube oil, etc.
4. Enter storage tank volume in gallons.
5. Enter storage tank diameter in feet.
6. Enter storage tank throughput in gallons per year.
7. Enter storage tank orientation using the following:  

VERT	Vertical Tank	HORZ	Horizontal Tank
------	---------------	------	-----------------
8. Enter storage tank average liquid height in feet.

## NATURAL GAS GLYCOL DEHYDRATION UNIT DATA SHEET

General Glycol Dehydration Unit Data		Manufacturer and Model		Sivalls			
				Max Dry Gas Flow Rate (mmscf/day)		<b>3.0 mmscf/day</b>	
				Design Heat Input (mmBtu/hr)		<b>0.25</b>	
				Design Type (DEG or TEG)		<b>TEG</b>	
				Source Status <sup>2</sup>		<b>ES</b>	
				Date Installed/Modified/Removed <sup>3</sup>		<b>Pre – 2005</b>	
				Regenerator Still Vent APCD <sup>4</sup>		<b>None</b>	
				Fuel HV (Btu/scf)		<b>1,020</b>	
				H <sub>2</sub> S Content (gr/100 scf)		<b>0.25</b>	
				Operation (hrs/yr)		<b>8,760</b>	
Source ID # <sup>1</sup>	Vent	Reference <sup>5</sup>	Potential Emissions <sup>6</sup>	lbs/hr	tons/yr		
RBV-1	Reboiler Vent	AP-42	NO <sub>x</sub>	<b>0.02</b>	<b>0.11</b>		
		AP-42	CO	<b>0.02</b>	<b>0.09</b>		
		AP-42	VOC	<b>&lt;0.01</b>	<b>0.01</b>		
		AP-42	SO <sub>2</sub>	<b>&lt;0.01</b>	<b>&lt;0.01</b>		
		AP-42	PM <sub>10</sub>	<b>&lt;0.01</b>	<b>0.01</b>		
RSV-1	Glycol Regenerator Still Vent	G35-A090	VOC	<b>1.98</b>	<b>8.66</b>		
		G35-A090	Benzene	<b>0.15</b>	<b>0.64</b>		
		G35-A090	Ethylbenzene	<b>0.33</b>	<b>1.44</b>		
		G35-A090	Toluene	<b>0.23</b>	<b>1.01</b>		
		G35-A090	Xylenes	<b>0.36</b>	<b>1.57</b>		
		G35-A090	n-Hexane	<b>0.04</b>	<b>0.15</b>		

1. Enter the appropriate Source Identification Numbers for the glycol dehydration unit Reboiler Vent and glycol Regenerator Still Vent. The glycol dehydration unit Reboiler Vent and glycol Regenerator Still Vent should be designated RBV-1 and RSV-1, respectively. If the compressor station incorporates multiple glycol dehydration units, a *Glycol Dehydration Unit Data Sheet* shall be completed for each, using Source Identification #s RBV-2 and RSV-2, RBV-3 and RSV-3, etc.

2. Enter the Source Status using the following codes:

NS Construction of New Source	ES Existing Source
MS Modification of Existing Source	RS Removal of Source

3. Enter the date (or anticipated date) of the glycol dehydration unit's installation (construction of source), modification or removal.

4. Enter the Air Pollution Control Device (APCD) type designation using the following codes:

NA	None	CD	Condenser
FL	Flare	CC	Condenser/Combustion Combination
TO	Thermal Oxidizer		

5. Enter the Potential Emissions Data Reference designation using the following codes:

MD	Manufacturer's Data	AP	AP-42
GR	GRI-GLYCalc™	OT	Other <u>      G35-A090      </u> (please list)

6. Enter the Reboiler Vent and glycol Regenerator Still Vent Potential to Emit (PTE) for the listed regulated pollutants in lbs per hour and tons per year. The glycol Regenerator Still Vent potential emissions may be determined using the most recent version of the thermodynamic software model GRI-GLYCalc™ (Radian International LLC & Gas Research Institute). Attach all referenced Potential Emissions Data (or calculations) and the GRI-GLYCalc *Aggregate Calculations Report* to this *Glycol Dehydration Unit Data Sheet(s)*. This PTE data shall be incorporated in the *Emissions Summary Sheet*.

**Include a copy of the GRI-GLYCalc™ analysis. This includes a printout of the aggregate calculations report, which shall include emissions reports, equipment reports, and stream reports.**

**\*An explanation of input parameters and examples, when using GRI-GLYCalc™ is available on our website.**

**West Virginia Department of Environmental Protection**

DIVISION OF AIR QUALITY : (304) 926-0475  
 WEB PAGE: <http://www.wvdep.org>

**Division of Air Quality**

**40 CFR Part 63; Subpart HH & HHH Registration Form**

*Complete this form for any oil and natural gas production or natural gas transmission and storage facility that uses an affected unit under HH/HHH, whether subject or not.*

<b>Section A: Facility Description</b>			
Affected facility actual annual average natural gas throughput (scf/day): <b>669,000</b>			
Affected facility actual annual average hydrocarbon liquid throughput: (bbl/day): None			
The affected facility processes, upgrades, or stores hydrocarbon liquids prior to custody transfer.			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
The affected facility processes, upgrades, or stores natural gas prior to the point at which natural gas (NG) enters the NG transmission and storage source category or is delivered to the end user.			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
The affected facility is: <input type="checkbox"/> prior to a NG processing plant <input type="checkbox"/> a NG processing plant <input checked="" type="checkbox"/> prior to the point of custody transfer and there is no NG processing plant			
The affected facility transports or stores natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company).			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
The affected facility exclusively processes, stores, or transfers black oil.			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Initial producing gas-to-oil ratio (GOR): _____scf/bbl      API gravity: _____degrees			
<b>Section B: Dehydration Unit (if applicable) <sup>1</sup></b>			
Description: <b>Sivalls TEG Dehydration Unit</b>			
Date of Installation: <b>Pre – 2005</b>	Annual Operating Hours: <b>8760</b>	Burner rating (MMbtu/hr): <b>0.25</b>	
Exhaust Stack Height (ft): <b>20</b>	Stack Diameter (ft): <b>0.85</b>	Stack Temp. (°F): <b>212</b>	
Glycol Type: <input checked="" type="checkbox"/> TEG <input type="checkbox"/> EG <input type="checkbox"/> Other:			
Glycol Pump Type: <input type="checkbox"/> Electric <input checked="" type="checkbox"/> Gas    If gas, what is the volume ratio? _____ACFM/gpm			
Condenser installed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    Exit Temp. _____°F    Condenser Pressure _____psig			
Incinerator/flare installed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    Destruction Eff. _____%			
Other controls installed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    Describe:			
Wet Gas <sup>2</sup> : Gas Temp.: <b>76</b> °F    Gas Pressure <b>166</b> psig (Upstream of Contact Tower) Saturated Gas? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No    If no, water content _____ lb/MMSCF			
Dry Gas: Gas Flowrate(MMSCFD)    Actual <b>0.67</b> Design <b>3.0</b> (Downstream of Contact Tower) Water Content <b>7.0</b> lb/MMSCF			
Lean Glycol: Circulation rate (gpm)    Actual <sup>3</sup> <b>3.0</b> Maximum <sup>4</sup> <b>3.5</b> Pump make/model: <b>Kimray 21015PV</b>			
Glycol Flash Tank (if applicable): Temp.: <b>NA</b> °F    Pressure <b>NA</b> psig    Vented?    Yes <input type="checkbox"/> No <input type="checkbox"/> If no, describe vapor control:			
Stripping Gas (if applicable): Source of gas: <b>NA</b> Rate _____ scfm			

**Please attach the following required dehydration unit information:**

1. System map indicating the chain of custody information. See Page 43 of this document for an example of a gas flow schematic. It is not intended that the applicant provide this level of detail for all sources. The level of detail that is necessary is to establish where the custody transfer points are located. This can be accomplished by submitting a process flow diagram indicating custody transfer points and the natural gas flow. However, the DAQ reserves the right to request more detailed information in order to make the necessary decisions.
2. Extended gas analysis from the Wet Gas Stream including mole percents of C<sub>1</sub>-C<sub>8</sub>, benzene, ethylbenzene, toluene, xylene and n-Hexane, using Gas Processors Association (GPA) 2286 (or similar). A sample should be taken from the inlet gas line, downstream from any inlet separator, and using a manifold to remove entrained liquids from the sample and a probe to collect the sample from the center of the gas line. GPA standard 2166 reference method or a modified version of EPA Method TO-14, (or similar) should be used.
3. GRI-GLYCalc Ver. 3.0 aggregate report based on maximum Lean Glycol circulation rate and maximum throughput.
4. Detailed calculations of gas or hydrocarbon flow rate.

**Section C: Facility NESHAPS Subpart HH/HHH status**

	<input checked="" type="checkbox"/> Subject to Subpart HH	
Affected facility	<input type="checkbox"/> Subject to Subpart HHH	
status:	<input type="checkbox"/> Not Subject	<input type="checkbox"/> < 10/25 TPY
(choose only one)	because:	<input type="checkbox"/> Affected facility exclusively handles black oil
		<input type="checkbox"/> The facility wide actual annual average NG throughput is < 650 thousand scf/day and facility wide actual annual average hydrocarbon liquid is < 250 bpd
		<input type="checkbox"/> No affected source is present

<b>COMPRESSOR STATION EMISSION SUMMARY SHEET FOR CRITERIA POLLUTANTS</b>										
Compressor Station						Registration Number <small>(Agency Use)</small> <b>G35-A</b>				
	Potential Emissions (lbs/hr)					Potential Emissions (tons/yr)				
Source ID No.	NO <sub>x</sub>	CO	VOC	SO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	CO	VOC	SO <sub>2</sub>	PM <sub>10</sub>
SEE ATTACHMENT I – Supporting Calculations										

<b>COMPRESSOR STATION EMISSION SUMMARY SHEET FOR HAZARDOUS/TOXIC POLLUTANTS</b>												
Compressor Station						Registration Number <small>(Agency Use)</small> <b>G35-A</b>						
	Potential Emissions (lbs/hr)					Potential Emissions (tons/yr)						
Source ID No.	Benzene	Ethyl-benzene	Toluene	Xylenes	n-Hexane	Formaldehyde	Benzene	Ethyl-benzene	Toluene	Xylenes	n-Hexane	Formaldehyde
SEE ATTACHMENT I – Supporting Calculations												

# **ATTACHMENT H**

**AIR POLLUTION CONTROL DEVICE SHEET**

**NOT APPLICABLE**



# **ATTACHMENT I**

## **SUPPORTING EMISSIONS CALCULATIONS**

### Reboiler 0.25 mmBtu/hr (RVB-1)

Pollutant	Emission Factor	Emission Factor Units	Emission Factor Basis / Source	Boiler Rating (MMBtu/hr)	Heat Value of Natural Gas (Btu/scf)	Annual Operating Hours	Max. Hourly Emissions. (lb/hr)	Max. Annual Emissions. (tpy)
VOC's	5.5	lb/10 <sup>6</sup> scf	AP-42 Chapter 1.4	0.25	1,020	8,760	0.001	0.01
Hexane	1.8	lb/10 <sup>6</sup> scf	AP-42 Chapter 1.4	0.25	1,020	8,760	<0.001	0.002
Formaldehyde	0.075	lb/10 <sup>6</sup> scf	AP-42 Chapter 1.4	0.25	1,020	8,760	<0.001	<0.001
Benzene	0.0021	lb/10 <sup>6</sup> scf	AP-42 Chapter 1.4	0.25	1,020	8,760	<0.001	<0.001
Toluene	0.0034	lb/10 <sup>6</sup> scf	AP-42 Chapter 1.4	0.25	1,020	8,760	<0.001	<0.001
Pb	0.0005	lb/10 <sup>6</sup> scf	AP-42 Chapter 1.4	0.25	1,020	8,760	<0.001	<0.001
CO	84	lb/10 <sup>6</sup> scf	AP-42 Chapter 1.4	0.25	1,020	8,760	0.02	0.09
NOx	100	lb/10 <sup>6</sup> scf	AP-42 Chapter 1.4	0.25	1,020	8,760	0.02	0.11
PM <sub>10</sub>	7.6	lb/10 <sup>6</sup> scf	AP-42 Chapter 1.4	0.25	1,020	8,760	0.002	0.01
SO <sub>2</sub>	0.6	lb/10 <sup>6</sup> scf	AP-42 Chapter 1.4	0.25	1,020	8,760	<0.001	<0.001
CO <sub>2</sub>	53.06	kg CO <sub>2</sub> / MMBtu	40 CFR Subpart C	0.25	1,020	8,760	29.24	128.09
CH <sub>4</sub>	0.001	kg CH <sub>4</sub> / MMBtu	40 CFR Subpart C	0.25	1,020	8,760	<0.001	0.00
N <sub>2</sub> O	0.0001	kg N <sub>2</sub> O / MMBtu	40 CFR Subpart C	0.25	1,020	8,760	<0.001	<0.001
Total HAPs							<0.001	0.002
Total CO <sub>2</sub> e							29.27	128.22

**Notes:**

- Emission rates displayed above represent the maximum hourly and maximum annual emissions for one reboiler.
- Greenhouse Gas Emissions are calculated using 40 CFR 98 Subpart C Table C-1 and C-2 emission factors.
- AP-42, Chapter 1.4 references are from the July 1998 revision.
- Max. Annual Emissions based upon Max. Hourly Emissions @ 8760 hr/yr.
- CO<sub>2</sub> equivalency solved for using Global Warming Potentials found in 40CFR98 Table A-1 (Updated January 2014). GWP CO<sub>2</sub>=1, GWP CH<sub>4</sub>=25, GWP N<sub>2</sub>O=298

**Example Equations:**

Max. Hourly Emission Rate (lb/hr) = Emission Factor (lb/10<sup>6</sup> scf) ÷ Heating Value of Natural Gas (Btu/scf) x Boiler Rating (MMBtu/hr)

**Total Poca T Emission Levels**

**Proposed Equipment (Corrected Reboiler Burner Rating)**

Emission Sources	VOCs		HAPs		CO		NO <sub>x</sub>		PM		SO <sub>2</sub>		CO <sub>2</sub>		CH <sub>4</sub>		N <sub>2</sub> O		CO <sub>2</sub> e	
	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr
Reboiler 0.25 mmBtu/hr (RVB-1)	0.00	0.01	<0.001	0.00	0.02	0.09	0.02	0.11	0.00	0.01	<0.001	<0.001	29.24	128.09	<0.001	0.00	<0.001	<0.001	29.27	128.22

**Previous PTE - G35-A090**

Emission Sources	VOCs		HAPs		CO		NO <sub>x</sub>		PM		SO <sub>2</sub>		CO <sub>2</sub>		CH <sub>4</sub>		N <sub>2</sub> O		CO <sub>2</sub> e	
	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr
Ajax DPC-360 - 346 hp (ENG-1)	1.61	7.01	0.23	1.01	1.07	4.68	4.81	21.03	-	-	-	-	-	-	-	-	-	-	-	-
Reboiler 0.18 mmBtu/hr (RVB-1) - Update	<0.001	0.00	<0.001	0.00	0.02	0.07	0.02	0.08	0.000	0.01	<0.001	<0.001	21.06	92.22	<0.001	0.00	<0.001	<0.001	21.08	92.32
TEG Dehy Still Vent (RSV-1)	1.98	8.66	1.11	4.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Totals</b>	<b>3.59</b>	<b>15.67</b>	<b>1.34</b>	<b>5.82</b>	<b>1.09</b>	<b>4.75</b>	<b>4.83</b>	<b>21.11</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>21.06</b>	<b>92.22</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>21.08</b>	<b>92.32</b>

**Net Change**

Emission Sources	VOCs		HAPs		CO		NO <sub>x</sub>		PM		SO <sub>2</sub>		CO <sub>2</sub>		CH <sub>4</sub>		N <sub>2</sub> O		CO <sub>2</sub> e	
	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr
<b>NET CHANGE</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.02</b>	<b>0.00</b>	<b>0.03</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>8.18</b>	<b>35.87</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>8.19</b>	<b>35.90</b>

**Proposed Facility Wide Emissions**

Emission Sources	VOCs		HAPs		CO		NO <sub>x</sub>		PM		SO <sub>2</sub>		CO <sub>2</sub>		CH <sub>4</sub>		N <sub>2</sub> O		CO <sub>2</sub> e	
	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr
Ajax DPC-360 - 346 hp (ENG-1)	1.61	7.01	0.23	1.01	1.07	4.68	4.81	21.03	-	-	-	-	-	-	-	-	-	-	-	-
Reboiler 0.25 mmBtu/hr (RVB-1)	0.00	0.01	<0.001	0.00	0.02	0.09	0.02	0.11	0.00	0.01	<0.001	<0.001	29.24	128.09	<0.001	0.00	<0.001	<0.001	29.27	128.22
TEG Dehy Still Vent (RSV-1)	1.98	8.66	1.11	4.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Totals</b>	<b>3.59</b>	<b>15.68</b>	<b>1.34</b>	<b>5.82</b>	<b>1.09</b>	<b>4.77</b>	<b>4.83</b>	<b>21.14</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>29.24</b>	<b>128.09</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>29.27</b>	<b>128.22</b>

# **ATTACHMENT J**

**CLASS I LEGAL ADVERTISEMENT**

## Attachment J

### AIR QUALITY PERMIT NOTICE Notice of Application

Notice is given that Cranberry Pipeline Corporation has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a General Permit G35-A Class II Administrative Update for a natural gas production operation located in McDowell County, West Virginia. The latitude and longitude coordinates are: 37.27665 and -81.60223.

The applicant estimates the maximum potential to discharge the following regulated air pollutants on a facility-wide basis will be:

Particulate Matter (PM) = 0.01 tpy  
Volatile Organic Compounds (VOC) = 15.68 tpy  
Carbon Monoxide (CO) = 4.77 tpy  
Nitrogen Oxides (NO<sub>x</sub>) = 21.14 tpy  
Hazardous Air Pollutants (HAPs) = 5.82 tpy  
Carbon Dioxide Equivalents (CO<sub>2</sub>e) = 128.2 tpy

Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57<sup>th</sup> Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1250, during normal business hours.

Dated this the X<sup>th</sup> day of October 2015.

By: Cranberry Pipeline Corporation  
Randy Spencer  
Safety and Environmental Manager  
900 Lee Street East, Suite 1500  
Charleston, WV 25301

# **ATTACHMENT K**

**ELECTRONIC SUBMITTAL**

**NOT APPLICABLE**

# **ATTACHMENT L**

**GENERAL PERMIT REGISTRATION APPLICATION FEE**

**Attachment L**  
**G70-A General Permit Application Fee**

An application fee of \$300.00 is being submitted by Cranberry Pipeline Corporation with this G35-A Class II Administrative Update Permit Application.



# **ATTACHMENT M**

**SITTING CRITERIA WAIVER**

**NOT APPLICABLE**

# **ATTACHMENT N**

**SAFETY DATA SHEETS (SDS)**

**NOT APPLICABLE**

# **ATTACHMENT O**

## **EMISSION SUMMARY SHEETS**

**Attachment O**  
**G35-A EMISSION SUMMARY SHEET**

Emission Point ID No. (Must match Emission Units Table & Plot Plan)	Emission Point Type <sup>1</sup>	Emission Unit Vented Through This Point (Must match Emission Units Table & Plot Plan)		Air Pollution Control Device (Must match Emission Units Table & Plot Plan)		All Regulated Pollutants - Chemical Name/CAS <sup>3</sup>  (Speciate VOCs & HAPS)	Maximum Potential Uncontrolled Emissions <sup>4</sup>		Maximum Potential Controlled Emissions <sup>5</sup>		Emission Form or Phase  (At exit conditions, Solid, Liquid or Gas/Vapor)	Est. Method Used <sup>6</sup>
		ID No.	Source	ID No.	Device Type		lb/hr	ton/yr	lb/hr	ton/yr		
E01	Upward Vertical Stack	ENG-1	Compressor Engine	N/A	N/A	Total VOCs Total HAPs CO NO <sub>x</sub>	1.61 0.23 1.07 4.81	7.01 1.01 4.68 21.03	N/A	N/A	Gas/Vapor	OTHER-G35-A090
E02	Upward Vertical Stack	RSV-1	Glycol Dehydrator Still Vent	N/A	N/A	Total VOCs Total HAPs	1.98 1.11	8.66 4.81	N/A	N/A	Gas/Vapor	OTHER-G35-A090
E03	Upward Vertical Stack	RBV-1	Glycol Dehydrator Reboiler	N/A	N/A	Total VOCs CO NO <sub>x</sub> PM CO <sub>2</sub> CO <sub>2e</sub>	<0.01 0.02 0.02 <0.01 29.24 29.27	0.01 0.09 0.11 0.01 128.09 128.22	N/A	N/A	Gas/Vapor	EE

The EMISSION SUMMARY SHEET provides a summation of emissions by emission unit. Note that uncaptured process emission unit emissions are not typically considered to be fugitive and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSIONS SUMMARY SHEET. Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions). Please complete the FUGITIVE EMISSIONS DATA SUMMARY SHEET for fugitive emission activities.

<sup>1</sup> Please add descriptors such as upward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.

<sup>2</sup> List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. **LIST** Acids, CO, CS<sub>2</sub>, VOCs, H<sub>2</sub>S, Inorganics, Lead, Organics, O<sub>3</sub>, NO, NO<sub>2</sub>, SO<sub>2</sub>, SO<sub>3</sub>, all applicable Greenhouse Gases (including CO<sub>2</sub> and methane), etc. **DO NOT LIST** H<sub>2</sub>, H<sub>2</sub>O, N<sub>2</sub>, O<sub>2</sub>, and Noble Gases

<sup>3</sup> Give maximum potential emission rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

<sup>4</sup> Give maximum potential emission rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

<sup>5</sup> Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; M = modeling; O = other (specify).