

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: R30-03900075-2012
Application Received: June 21, 2011
Plant Identification Number: 03900075
Permittee: Cranberry Pipeline Corporation
Facility Name: Horsemill Compressor Station
Mailing Address: 102 Third Street
Glasgow, WV 25086

Physical Location: Cedar Grove, Kanawha County, West Virginia
UTM Coordinates: 461.61 km Easting • 4232.07 km Northing • Zone 17
Directions: From U.S. Route 60 in Cedar Grove, turn onto Kelly's Creek Road.
Travel approximately 0.25 miles and turn left into Horsemill Hollow.

Facility Description

Horsemill Compressor Station is a natural gas gathering facility covered by Standard Industrial Classification (SIC) Code 1389. The station has the potential to operate twenty-four (24) hours per day, seven (7) days per week, fifty-two (52) weeks per year. The station consists of one (1) 600 HP natural gas compressor engine, one (1) 800 HP natural gas compressor engine, a glycol dehydration unit and 4 tanks of various sizes.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2010 Actual Emissions
Carbon Monoxide (CO)	24.40	3.90
Nitrogen Oxides (NO _x)	202.71	32.31
Particulate Matter (PM ₁₀)	2.16	0.14
Total Particulate Matter (TSP)	2.16	0.14
Sulfur Dioxide (SO ₂)	0.04	< 0.01
Volatile Organic Compounds (VOC)	18.84	2.06
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2010 Actual Emissions
Total HAPs	2.14	0.43

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit over 100 tons of NO_x. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, Horsemill Compressor Station is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Control of particulate matter from indirect heat exchangers
	45CSR6	Open burning prohibited
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permits for construction, modification, relocation, etc
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting
	45CSR30	Operating permit requirement
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 63 Subpart HH	NESHAP: Oil & Natural Gas Production Facilities.
	40 C.F.R. Part 63, Subpart ZZZZ	RICE MACT
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR17	Control of fugitive particulate matter

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2808A	4/11/11	N/A

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

Changes made to the most recent version to this Title V Permit are summarized below:

- Miscellaneous**
The year installed date for Emission Units Engine #1 and #2 have been changed from 1993 to 1983 and 1985, respectively. This corrects the previous version.
The Greenhouse Gas Reporting Requirements have been removed from Conditions 3.1.10 and 3.5.11.
Updates have been made to the Permit boilerplate.
- 40CFR63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**
The facility is subject to the area source requirements of this Subpart. The compliance date for these conditions unless specified elsewhere in the Permit is October 19, 2013. The facility has two engines (#1 and #2) that are subject to this Subpart. They are non-emergency four stroke rich burn engines that are greater than 500 brake horsepower and operate more than 24 hours per year.
Condition 7.1.1 has been added and limits the formaldehyde concentration emissions.
Condition 7.1.2 has been added to ensure proper operation of the control device.
Condition 7.1.3 has been added to show initial compliance of the formaldehyde concentration.
Condition 7.1.4 has been added to ensure proper operation and maintenance of the affected units.
Condition 7.1.5 has been added to demonstrate continuous compliance with the formaldehyde concentration limits.
Condition 7.2.1 has been added to specify monitoring CO and either CO₂ or oxygen at the inlet and outlet of the control device, as well as proper operation of the monitoring device.
Condition 7.2.2 has been added to require continuous monitoring to show compliance with the formaldehyde emissions, and to not use bad data.
Condition 7.3.1 has been added and specifies the testing that is required for the initial performance test.
Condition 7.3.2 has been added and specifies how the test is conducted.

Condition 7.3.3 has been added and requires subsequent performance tests be completed every 8,760 hours, or 3 years, whichever comes first.

Condition 7.4.1 has been added and requires recordkeeping for notification, reporting, performance tests, and the continuous monitoring data.

Condition 7.5.1 has been added and requires reports for things such as deviations, malfunctions, and compliance reporting.

Condition 7.5.2 has been added and specifies the dates of notifications.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

1. Greenhouse Gas Tailoring Rule

This is a renewal Title V Permit and there have been no changes that would have triggered a PSD permit. As such, there are no applicable GHG permitting requirements.

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: January 26, 2012
Ending Date: February 27, 2012

All written comments should be addressed to the following individual and office:

Mike Egnor
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Mike Egnor
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1208 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

The following changes have been made upon comments from EPA:

*Responses are in blue underline. Original EPA comments are in black.

Condition 3.5.3

Update U.S.EPA contact info. Office should be 3AP20. Also, the name of the office should be "Office of Air Enforcement and Compliance Assistance"

The address for the EPA has been corrected in Condition 3.5.3.

Condition 5.1.1

The wording is not clear and I would recommend revising. I had a similar comment on a compressor station permit U.K. worked on. See the language that he came up with.

Compliance with the maximum throughput limitation of the glycol dehydration unit in Condition 5.1.1 has been revised to require daily records. Condition 5.4.1 has been revised to require monthly records of the daily throughput.

Condition 5.4.2

Move to section 4.2

Section 5 of the Permit addresses specifically limiting the wet natural gas throughput for the glycol dehydration unit/still column (Condition 5.1.1) and provides emission limits for VOCs and HAPs (Condition 5.1.2). Condition 5.4.2 (Condition 5.4.2 of R13-2808A) did mention Condition 4.1.1, but the recordkeeping in this condition is related to the glycol dehydration unit emission monitoring of Condition 5.2.1 and the wet gas testing requirements of Condition 5.3.1 used to demonstrate compliance with the emission limits of Condition 5.1.2. Since this condition demonstrates compliance with the limits of Condition 5.1.2 instead of Condition 4.1.1 (which is a statement that the facility is an area source), Condition 5.4.2 was revised to reference 5.1.2 instead of 4.1.1.

Annual TPY limits in 4.1.1, 5.1.2, and 6.1.1

in order to be federally enforceable, ton/yr limits need to be calculated at least once/month (i.e. expressed as the sum of the previous consecutive 12-months) The TPY limits all reference 5.2.1 as the method of demonstrating compliance, which is required bi-monthly. The simple fix is to require the values in the second half of 5.2.1 to be monitored monthly, although if you have any other ideas let me know.

Condition 4.1.1 is a statement from R13-2808A that the facility is an area source of HAPs. The facility has calculated their PTE of HAPs based upon maximum operation of the engines and dehydration vent. The facility has no control devices and the PTE of total HAPs are 2.14 TPY. Condition 4.1.1 was not intended to limit the facility's potential to emit because the facility-wide potential to emit of HAPs is well below 10 TPY of any single HAP and 25 TPY of total HAPs. Based on the recommendation of Mike Gordon from EPA Region III from his e-mail dated March 21, 2012, Conditions 4.1.1 and 4.2.1 have been changed to "State-Enforceable only" conditions.

Condition 5.1.2 provides the maximum emission limits for the glycol dehydration unit/still column based on the maximum daily wet natural gas throughput to the glycol dehydration unit/still column (Condition 5.1.1); and calculation of emissions using GRI-GlyCalc along with a wet gas sampling analysis. The annual limits were based on the daily wet natural gas throughput and 8,760 hours of operation. To demonstrate compliance with the emission limits in Condition 5.1.2, the permittee will monitor the wet natural gas throughput (Condition 5.1.1) on a daily basis. As an additional means of compliance, the permittee will be required on an annual basis to reevaluate the GRI-GlyCalc emission estimates using the maximum daily natural gas throughput (Condition 5.1.1) along with a new wet gas stream analysis (Condition 5.3.1) and new operating parameters for the glycol dehydration unit/still column (Condition 5.2.1). The new operating parameters will be annual average values calculated from the bi-monthly records of the actual operating parameters. The bi-monthly recordkeeping referred to in EPA's comment is not the method of demonstrating compliance with the hourly and annual emission limits in Condition 5.1.2. A

record of the daily natural gas throughput is the method used, which is much more frequent than monthly as EPA suggested. Therefore, no change was made to Condition 5.2.1.

Emission limits in Condition 6.1.1 shall be calculated in accordance with 40 C.F.R. 63, Subpart HH as specified in Condition 6.1.2.b. Where Condition 6.1.2 allowed streamlining by monitoring in accordance with Condition 5.2.1 and testing as outlined in 5.3.1, the permittee will be demonstrating compliance with these limits on a daily basis by monitoring and recording the daily wet natural gas throughput.

Condition 6.1.5

Recommend clarifying language to: "if the annual emissions of benzene from the dehydration unit for 2009 or any consecutive 12-month period thereafter..."

In order to clarify that the calculation of benzene emissions shall be based on the methods and averaging times specified in 40 C.F.R. 63, Subpart HH, Condition 6.1.5 has been revised as follows: "If the annual emissions of benzene from the dehydration unit for 2009 or any year thereafter equals or exceeds 0.90 megagram per year (1 tpy) as calculated per 40C.F.R.§63.772(b)(2) (Condition 6.1.2 of this permit), the permittee shall comply with 40C.F.R.§§764(d)(1)(i) through (iii) (Condition 6.1.4 of this permit)."