

Fact Sheet



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

Permit Number: **R30-09900012-2017**
Application Received: **July 11, 2016**
Plant Identification Number: **03-54-09900012**
Permittee: **Cranberry Pipeline Corporation**
Facility Name: **Beech Fork Compressor Station**
Mailing Address: **Route 152, Wayne, WV 25570**

Physical Location: Wayne, Wayne County, West Virginia
UTM Coordinates: 375.35 km Easting • 4239.79 km Northing • Zone 17
Directions: Take Exit 8 from I-64 to 152 South towards Lavalette. From Lavalette go approximately 2 miles on 152 south and turn left onto Falls Branch Road. Travel approximately 1.5 miles to the station on the right.

Facility Description

Beech Fork Compressor Station is a natural gas transmission facility covered by Standard Industrial Classification (SIC) Code 1311 and by North American Industry Classification System 211111. The station has the potential to operate twenty-four (24) hours per day, seven (7) days per week, and fifty-two (52) weeks per year. The station consists of three (3) 540 HP natural gas compressor engines and four (4) storage tanks of various sizes.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2016 Actual Emissions
Carbon Monoxide (CO)	19.81	2.21
Nitrogen Oxides (NO _x)	128.11	14.15
Particulate Matter (PM _{2.5})	2.31	0.26
Particulate Matter (PM ₁₀)	2.31	0.26

Regulated Pollutants	Potential Emissions	2016 Actual Emissions
Total Particulate Matter (TSP)	2.31	0.26
Sulfur Dioxide (SO ₂)	0.04	0.01
Volatile Organic Compounds (VOC)	23.63	2.93

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2016 Actual Emissions
Benzene	0.12	0.01
Toluene	0.06	0.01
Ethylbenzene	0.01	<0.01
Xylene	0.02	0.01
n-Hexane	0.04	0.01
Formaldehyde	4.69	0.3

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

Title V Program Applicability Basis

This facility has the potential to emit 128.11 tons per year of Nitrogen Oxides. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Cranberry Pipeline Corporation 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:	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for Hazardous Air Pollutants for Source Categories Pursuant to 40CFR63
	40 C.F.R. Part 61	Asbestos inspection and removal
State Only:	40 C.F.R. Part 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
	45CSR4	No objectionable odors.
	45CSR17	To Prevent and Control Fugitive Particulate Matter Air Pollution from Materials

Handling, Preparation, Storage and Other
 Sources 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>)
None		

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," which may be downloaded from DAQ's website.

Determinations and Justifications

Per company's request, a new line heater(LH-1) was added to the Emission Unit table. This new line heater was installed (LH-1) after the last renewal permit. Since this heater didn't trigger the construction permitting thresholds, it did not need a Rule 13 permit. The line heater(LH-1) is subject to Rule 2 opacity requirements. The requirements were added as conditions 3.1.10 and 3.1.11 of this permit.

Non-Applicability Determinations

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

45CSR21	<i>To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds.</i> This facility is not subject to 45CSR§§21-27 and 28 since all the petroleum liquid storage tanks at the Beech Fork station are below 40,000 gallons in capacity. 45CSR§21-29 does not apply because the Beech Fork station is not engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both.
45CSR27	<i>To Prevent and Control the Emissions of Toxic Air Pollutants</i> does not apply since natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment that is "used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight."
40 C.F.R. Part 60 Subpart III	<i>Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.</i> The three (3) 540 HP reciprocating engines with integral compressors were manufactured before July 11, 2005 and they are not compression ignition engines. Thus, these engines are not subject to 40 C.F.R. Part 60 Subpart III.

40 C.F.R. Part 60 Subpart JJJJ	<i>Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.</i> The three (3) 540 HP reciprocating engines with integral compressors were constructed before June 12, 2006. Thus, these engines are not subject to 40 C.F.R. Part 60 Subpart JJJJ.
40 C.F.R. Part 63 Subpart HH	<i>National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities.</i> The Beech Fork Compressor Station is upstream of the CGT's Kenova Compressor Station and the Markwest Extraction facility, but it is not subject to Subpart HH since the station does not contain an affected source (triethylene glycol (TEG) dehydration unit) as identified in 40 C.F.R. §§ 63.760 (d) and (b) (2).
40 C.F.R. Part 63 Subpart HHH	<i>National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities.</i> The Beech Fork Compressor Station is not subject to Subpart HHH since the station does not have a glycol dehydration facility as well as the station is not a major source of HAPs.
40 C.F.R. Part 64	The compliance assurance monitoring provisions of Part 64 are not applicable due to there being no add-on controls at this facility, according to 40CFR§64.2(a)(2).

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: Wednesday, May 3, 2017
 Ending Date: Friday, June 2, 2017

Point of Contact

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

Beena Modi
 West Virginia Department of Environmental Protection
 Division of Air Quality
 601 57th Street SE
 Charleston, WV 25304
 Phone: 304/926-0499 ext. 1228 • Fax: 304/926-0478
 Beena.j.modi@wv.gov

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.

Response to Comments (Statement of Basis)

A comment was received from Paul Wentworth of US EPA Region III on May 22, 2017 regarding the Draft/Proposed Permit for Cranberry Pipeline Corporation, Beech Fork Station, R30-09900012-2017. The following is EPA's comment with the DAQ's response:

EPA Comment: The previous fact sheet for the 2012 renewal shows the potential emissions for NO_x to be 216.72 Tons Per Year. This conflicts with the current potential emissions for NO_x as reported in the fact sheet which is 128.11 Tons Per Year. Please provide an explanation in the present fact sheet for the decrease.

DAQ Response: The engines were actually DPC-540s instead of DPC-600s as originally permitted. As a result, this changed the NO_x emission factors to reduce emissions substantially from 13 g/hp hr to 8.6. This change was also compounded by the reduction in HP from 600 to 540. The following is the explanation of NO_x emission calculations.

DPC- 540 (2017 permit)

Source	NO _x
3 Engines(ton/yr)	127.464(42.49X3)
Line Heater(ton/yr)	0.644
Total	128.11

DPC- 600 (2012 permit)

Source	NO _x
3 Engines(ton/yr)	72.2411x3
Total	216.72

As a result of the information on engine model and size received by the facility to address EPA's comment, changes to the engine models and design capacities were required to be made to the Emission Units Table in the Title V permit and to the Facility Description in the Fact Sheet. The engine models were changed from "DPC-600" to "DPC-540" and the design capacities were changed from "576 HP" to "540 HP".