

Fact Sheet



For Draft/Proposed Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-03500003-2012**
Application Received: **November 2, 2012**
Plant Identification Number: **03500003**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Ripley Compressor Station**
Mailing Address: **1700 MacCorkle Avenue, SE**
Charleston, WV 25314

Physical Location: Ripley, Jackson County, West Virginia
UTM Coordinates: 440.1 km Easting • 4303.4 km Northing • Zone 17
Directions: Traveling I-79N from Charleston, exit at Ripley onto US Rte. 33 and proceed to the town of Ripley and the intersection with Secondary Rte. 21 (formerly US & State Rte. 21). Turn left onto Rte. 21 and continue approximately 5.5 miles to the station which is on the left.

Facility Description

The Ripley Station is a natural gas transmission facility covered by Standard Industrial Classification (SIC) 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of two (2) 2,250-hp natural gas fired reciprocating engines, two (2) 306-hp emergency generators, one (1) 30 HP air compressor, one (1) heating system boiler, one (1) fuel heater, one (1) liquids knockout system, one (1) Wastewater evaporator and fourteen (10) storage tanks of various sizes.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Criteria Pollutants	Potential Emissions	2011 Actual Emissions
Carbon Monoxide (CO)	153.86	16.51
Nitrogen Oxides (NO _x)	223.26	46.08
Particulate Matter (PM ₁₀)	6.68	1.77
Total Particulate Matter (TSP)	6.68	1.77
Sulfur Dioxide (SO ₂)	0.15	0.04
Volatile Organic Compounds (VOC)	21.08	5.99
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2011 Actual Emissions
Formaldehyde	9.76	2.54
Other HAPs	2.06	0.01
Total HAPs*	11.82	2.56
<i>Some of the above HAPs may be counted as PM or VOCs.</i>		
* HAPs are not speciated because no applicability was triggered.		

Title V Program Applicability Basis

This facility has the potential to emit 153.86 tons/yr of CO and 223.26 tons/yr of NOx. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Columbia Gas Transmission, LLC 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	Indirect Heat Exchangers
	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.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. 63, Subpart ZZZZ	NESHAPs MACT for Stationary RICEs
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances

State Only:	45CSR4 45CSR17	No objectionable odors. Particulate Fugitive
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Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft 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, 45CSR15, 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 B which may be downloaded from DAQ's website.

Determinations and Justifications

This facility was previously registered under General Permit R30-NGGP-2007 for Natural Gas Compressor Facilities. The Division of Air Quality did not renew the general permit for natural gas compressor facilities, therefore this facility's renewal will be issued as a source-specific permit. The source-specific permit includes various requirements which are potentially applicable to natural gas compressor stations. The "Applicable Requirements" column in the Section 1.0 Emission Units Table of the permit indicates which of the requirements in Sections 2.0 through 24.0 are applicable to each emissions unit.

1. 45CSR2 - *To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers* - the facility currently employs one boiler (BLR1) and a heater (HTR1). With a design heat input of less than 10 MM BTU/hr, the sources are subject to the opacity limits set forth by 45CSR§2-3 (Section 4.0).

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity
BLR1* (001-01)	BL1	Heating System Boiler	1979	4.0 MMBtu/hr
HTR1* (001-02)	H1	Indirect Heater	1979	0.09 MMBtu/hr

* Burns pipeline quality natural gas only.

2. 40 C.F.R. Part 63 Subpart ZZZZ - *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines* - per 40 C.F.R § 63.6590(a)(1)(iii) all engines at this area source of HAP emissions are considered "existing stationary RICE", because they were constructed before June 12, 2006. Therefore, the requirements of this subpart are applicable to these engines as follows:

Engine	Design Capacity	Ignition	Use/Type	Year installed	HAPs Source
E01*	2,250 HP	Spark (SI)	Non-Emergency 2SLB	1980 (existing)	Area
E02*	2,250 HP	Spark (SI)	Non-Emergency 2SLB	1980 (existing)	Area
G1*	306 HP	Spark (SI)	Emergency 4SRB	1954 (existing)	Area
G2*	306 HP	Spark (SI)	Emergency 4SRB	1954 (existing)	Area
AC1*	30 HP	Spark (SI)	Emergency 4SRB	1954 (existing)	Area

* Burns pipeline quality natural gas only.

Non-Applicability Determinations

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

1. 45CSR2 - *To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers* - the facility currently employs one boiler and one heater (see item 1 in the Determinations and Justifications Section above). With a design heat input of less than 10 MM BTU/hr, per 45CSR§2-11.1, the facility is exempt from 45CSR§2-4 - “Weight Emission Standards”, 45CSR§2-5 - “Control of Fugitive Particulate Matter”, 45CSR§2-6 - “Registration”, 45CSR§2-8 - “Testing, Monitoring, Recordkeeping, and Reporting”, and 45CSR§2-9 - “Start-ups, Shutdowns and Malfunctions”.
2. 45CSR6 – *Control of Air Pollution from Combustion of Refuse* - this facility does not have any incinerator (or flare); hence this rule is not applicable to this facility.
3. WVDEP determined that 45CSR10 does not apply to gas fired engines. Also, 45CSR10 is not applicable to the facility boiler and heater because their design heat input is less than 10 MMBtu/hr (see item 1 in the Determinations and Justifications Section above).
4. 40 C.F.R. 60 Subparts K, Ka – *Standards of Performance for Storage Vessels for Petroleum Liquids* - All tanks at Ripley station are below 40,000 gallons in capacity, therefore this Subpart is not applicable.
5. 40 C.F.R. 60 Subpart Kb - *Standards of Performance for Volatile Organic Liquid Storage Vessels - for Petroleum Liquids (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*. All tanks at Ripley station are below 75 m³ (19,813 gallons) in capacity, therefore per §60.110b(a) they are exempt from the requirements of this Subpart:

Tank ID	Design Capacity	Description	Year installed
A12	8,000 gallon	Pipeline liquids, horizontal, above ground	01/01/1996
A13	8,000 gallon	Pipeline liquids, horizontal, above ground	01/01/1996

A14	8,000 gallon	Pipeline liquids, horizontal, above ground	01/01/1996
A15	1,000 gallon	Oil lubrications, horizontal, above ground	10/20/1997
A16	1,000 gallon	Oil, used, horizontal, above ground	10/20/1997
A17	10,,000 gallon	Wastewater, horizontal, above ground	01/01/1999
A18	550 gallon	A18	10/01/1972
A19	75 gallon	A19	
A20	75 gallon	Lube oil tank	
A22	550 gallon	Methanol, vertical, above ground	10/01/2001
B01	1,000 gallon	Monoethylene glycol, vertical, below ground	01/01/1980
B02	3,396 gallon	Glycol mixture, horizontal, below ground	01/01/1980
B03	4,500 gallon	Oil lubrications, horizontal, below ground	01/01/1979

6. 40 C.F.R. 60 Subpart KKK - *Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant* - Ripley station is not engaged in the extraction or fractionation of natural gas liquids from field gas, the fractionation of mixed natural gas liquids to natural gas products, or both.
7. 45CSR21 - *To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds* - This facility is not located in one of the affected counties.
8. 45CSR27 - *To Prevent and Control the Emissions of Toxic Air Pollutants* - Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment “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.”
9. 40 C.F.R. 60 Subparts Dc - *Standards of Performance for Steam Generating Units* – boiler BLR1 and fuel heater HTR1 have a capacity of less than 10 MMBtu/hr; Hence Subpart Dc is not applicable.
10. 40 C.F.R. Part 60 Subpart IIII - *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* - The provisions of this subpart are not applicable to this facility because there are no stationary compression ignition (CI) internal combustion engines (ICE) at this facility.
11. 40 C.F.R. Part 60 Subpart JJJJ - *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines* – all engines at the facility were constructed before June 12, 2006, therefore this subpart is not applicable.
12. 40 C.F.R. Part 60 Subpart GG - *Standards of Performance for Stationary Gas Turbines* - there are no turbines at the Ripley Station, therefore 40 C.F.R. Part 60 Subpart GG is not applicable.
13. 40 C.F.R. Part 60 Subpart KKKK - *Standards of Performance for Stationary Combustion Turbines* - there are no turbines at the Ripley Station, therefore the subpart is not applicable.
14. 40 C.F.R. Part 63 Subpart HH - *National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities* – this rule is not applicable because this facility is not an oil and gas production facility, it is a transmission facility.

15. 40 C.F.R. Part 63 Subpart HHH - *National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities* – according to 40 C.F.R. §63.1270 (a), Subpart HHH applies to natural gas transmission and storage facilities that are major source of HAPs. Since the Ripley Station is an area source of HAPs, and also it doesn't have a glycol dehydration unit, this Subpart is not applicable.
16. 40 C.F.R. Part 63 Subpart YYYY - *National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines* – there are no turbines at the Ripley Station, and in addition this station is not a major source of HAPs, therefore the subpart is not applicable.
17. 40 C.F.R. Part 63 Subpart DDDDD - *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters* - according to 40 C.F.R. §63.7485, 40 C.F.R. Part 63 Subpart DDDDD applies to boilers at a major source of HAPs. Since Ripley Station is an area source of HAPs, requirements of this Subpart are not applicable.
18. 40 C.F.R. Part 63 Subpart JJJJJ – *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* - this subpart applies to boilers at area HAP sources, however the Ripley Station's boiler is gas-fired, therefore per §63.11195(e) it is exempt from the requirements of this Subpart.
19. 40 CFR 64 - *Compliance Assurance Monitoring (CAM) Plan* – no emission units have any add-on control; therefore, in accordance with 40 C.F.R § 64.2(a), CAM is not applicable to this facility.

There are no Greenhouse Gas Clean Air Act requirements for this facility because the facility has not made any changes that triggered a PSD permit modification.

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: (Date of Notice Publication)
Ending Date: (Publication Date PLUS 30 Days)

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

Natalya V. Chertkovsky-Veselova
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

Natalya V. Chertkovsky-Veselova
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1220 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

(Choose) Not applicable.

OR

Describe response to comments that are received and/or document any changes to the final permit from the draft/proposed permit.