

Fact Sheet



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

Permit Number: **R30-02100001-2017**
Application Received: **September 14, 2016**
Plant Identification Number: **03-54-02100001**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Glenville Compressor Station**
Mailing Address: **3208 WV Highway 5E, Glenville, WV 26351-7618**

Physical Location: Glenville, Gilmer County, West Virginia
UTM Coordinates: 519.7 km Easting • 4,308.5 km Northing • Zone 17
Directions: Traveling I-79 North, exit at Burnsville and turn left onto State Route 5.
Proceed for approximately 12 miles to the station that is located on the left.

Facility Description

Glenville Compressor Station is a natural gas transmission facility covered by Standard Industrial Classification (SIC) Code 4922 and North American Industrial Classification System (NAICS) Code 486210. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of five (5) 2000 hp natural gas fired reciprocating engines, one (1) 1,063 hp-emergency generator, two (2) 7,943 hp turbine engines and two (2) 1.1 MMBTU/hr Fuel Gas Heaters.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2016 Actual Emissions
Carbon Monoxide (CO)	282.92	61.84
Nitrogen Oxides (NO _x)	1,235.35	190.2
Particulate Matter (PM _{2.5})	21.45	2.76
Particulate Matter (PM ₁₀)	21.45	2.76
Total Particulate Matter (TSP)	21.45	2.76
Sulfur Dioxide (SO ₂)	30.34	0.36
Volatile Organic Compounds (VOC)	52.93	13.0

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2016 Actual Emissions
Benzene	0.72	0.01
Toluene	0.43	0.06
Ethylbenzene	0.06	0.02
Xylene	0.13	0.03
n-Hexane	0.21	0.01
Formaldehyde	20.81	3.0
Acetaldehyde	2.90	0.02
Other HAPs	4.75	0.00
Total HAPs	30.01	3.15

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

Title V Program Applicability Basis

This facility has the potential to emit 1,235.35 tons/yr of NO_x, 282.92 tons/yr of CO, 20.81 tons/yr of Formaldehyde and 30.01 tons/yr of total HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of an individual HAP and over 25 tons per year of total HAPs, 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.
45CSR13	Construction Permit
45CSR16	NSPS
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 HAPs
40 C.F.R. Part 61	Asbestos inspection and removal
40 C.F.R. 60 Subpart JJJJ	Spark Ignition Internal Combustion Engines NSPS
40 C.F.R. 60 Subpart KKKK	Turbine NSPS
40 C.F.R. 63 Subpart DDDDD	Boiler MACT
40 C.F.R. 63 Subpart YYYY	Turbine MACT
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	Particulate Fugitive

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>)
R13-3110	11/06/2013	

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, Emission Unit HTR1 was added to the Emission Unit table and Emission Unit 013G2 was removed from the Emission Unit table. Applicable requirements for Emission Unit IDs- HTR1 and HTR2 were included in sections 4.0 and 6.0 of this permit. Applicable requirements for Emission Unit ID-013G3 were included in sections 5.0 and 7.0 of this permit. Applicable requirements for Emission Unit IDs- 013T1 and 013T2 were included in section 8.0 of this permit. Section 9.0 of this permit includes R13-3110 requirements for Emission Unit IDs- 013T1, 013T2, 013H2 and 013G3 which were not included in sections 6.0, 7.0 and 8.0.
- **Subpart DDDDD:** The proposed heater (Emission Unit HTR1) was added to preheat the natural gas just prior to being combusted in the turbine. The heater (Emission Unit HTR1) is classified as a process heater under the NESHAP for Industrial, Commercial, and Institutional Boiler and Process Heater (Subpart DDDDD) and therefore is an affected source under the subpart. This heater is designed to burn natural gas (Gas I Unit) and will have a heat input rating of 1.1 MMBtu/h. These key features (natural gas and less than 5 MMBtu/hr heat input) makes this heater only being subject to the work practice requirements of this subpart. These requirements and the corresponding reporting will be incorporated in section 6 of this permit.
- Per company’s request on 6/9/17, the installation date of Emission Point ID E06 was corrected from 1971 to 1960 in the Emission Unit Table.
- Per company’s email on 6/9/17, both the Mercaptan tanks were removed on 9/1/14 and the Mercaptan flare was also removed in 2014. Therefore, applicable requirement 3.1.9 was removed from this permit.
- The turbines (Emission Point IDs- T01&T02) are not indirect heat exchangers. Therefore, the streamlining language from condition 4.1.1.b of R13-3110 was not included.
- Condition 9.1.2. does not include the streamlining language for 45CSR§ 2-4.1.b and 45CSR§10-3.1.e from condition 4.1.2.c of R13-3110 since the heater is less than 10mmbtu/hr.
- Condition 9.1.3 does not include the streamlining language from condition 4.1.3.f of R13-3110 since the engine is not a fuel burning as defined by 45CSR10.

Non-Applicability Determinations

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

45CSR4	<i>To Prevent and Control the Discharge of Air Pollutants into the Open Air Which Cause or Contributes to an Objectionable Odor or Odors:</i> This State Rule shall not apply to the following source of objectionable odor until such time as feasible control methods are developed: Internal combustion engines.
45CSR10	<i>To Prevent and Control Air Pollution from the Emission of Sulfur Oxides:</i> The sulfur requirement for fuel burning units does not apply to indirect combustion sources at this site because there are no units with design heat inputs above 10 MMBtu/hr. Therefore, they are exempt in accordance with 45CSR§10-10.1.
45CSR21	<i>To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds:</i> This facility is not located in one of the subject counties defined by this rule: Wood, Wayne, Putnam, Kanawha, or Cabell.

45CSR27	<i>To Prevent and Control the Emissions of Toxic Air Pollutants:</i> 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.”
40 C.F.R. Part 60 Subpart III	<i>Standards of Performance for Stationary Compression Ignition Internal Combustion Engines:</i> There are no compression ignition engines at this facility.
40 C.F.R. Part 60 Subpart OOOO	<i>Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which Construction, Modification, or Reconstruction Commenced after August 23, 2011 and on or before September 18, 2015.</i> The Storage Vessel requirements defined for transmission sources are not applicable to this site because all vessels commenced construction, modification, or relocation prior to August 23, 2011 accordance with 40CFR§60.5365(e).
40 C.F.R. Part 60 Subpart OOOOa	<i>Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced after September 18, 2015.</i> The GHG and VOC requirements defined by this NSPS are not applicable to this site because all affected sources commenced construction, modification, relocation prior to September 18, 2015 in accordance with 40CFR§60.5365a.
40 C.F.R. Part 60 Subpart Dc	<i>Standards of Performance for Steam Generating Units:</i> The fuel gas heaters at this facility are less than 10 MMBtu/hr design heat capacity, which is below the applicability criteria stated in 40CFR6§0.40c(a).
40 C.F.R. Part 60 Subpart K and Ka	<i>Standards of Performance for Petroleum Liquid Storage Vessels.</i> All tanks at the station are below the applicability criteria of 40,000 gallons in capacity as stated in 40§§CFR60.110(a) and 60.110a(a).
40 C.F.R. Part 60 Subpart Kb	<i>Standards of Performance for Volatile Organic Liquid Storage Vessels.</i> All tanks at the station are between 75 m ³ (19,813 gallons) and 151 m ³ (39,890 gallons) in capacity storing a liquid with a maximum true vapor pressure less than 15 kPa (112.5 mmHg). Therefore, they are exempt from this subpart as stated in the applicability criteria of 40CFR§§60.110b(a) and (b).
40 C.F.R. Part 60 Subpart KKK	<i>Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant(s).</i> The 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. As a result, the station has no affected sources operating within this source category.
40 C.F.R. Part 60 Subpart GG	The provisions of this subpart are not applicable because the turbines were installed after the applicability date of 40C.F.R 60 subpart KKKK and are exempt from 40 C.F.R 60 subpart GG per §60.4305(b).
40 C.F.R. Part 63 Subpart YYYY	The provisions of this subpart are not applicable because although turbines have been installed at this major HAP source, the control requirements of this regulation for natural gas fired units was stayed.
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 transmission station is not subject to Subpart HHH since there are no affected dehydration units utilized at this site.
40 C.F.R. Part 64 CAM	The compliance assurance monitoring provisions of Part 64 are not applicable due to there being no add-on controls at this facility. [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: Thursday, June 29, 2017
Ending Date: Monday, July 31, 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
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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)

Not applicable.