

Fact Sheet



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

Permit Number: **R30-00700100-2022**
Application Received: **April 6, 2021**
Plant Identification Number: **007-00100**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Frametown Compressor Station**
Mailing Address: **1700 MacCorkle Avenue SE, Charleston, WV 25314**

Physical Location: 1598 Wilsie Road, Frametown, Braxton County, West Virginia
UTM Coordinates: 511.970 km Easting • 4,279.227 km Northing • Zone 17
Directions: Travel approximately 0.5 miles north from Frametown on State Route 4 and turn left onto County Route 9. Proceed on CR 9 approximately 1.5 miles to the station which is on the right side of the road.

Facility Description

The Frametown Compressor Station is a natural gas transmission facility covered by Standard Industrial Classification (SIC) Code 4922, and North American Industrial Classification System (NAICS) Code 48621. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of one (1) 12,500-hp, one (1) 3,350-hp, one (1) 3,550-hp and one (1) 16,300-hp turbine engines, one (1) 925-hp emergency generator, one (1) 0.8 mmBtu/hr fuel gas heater, forty (40) 0.072 mmBtu/hr space heaters, multiple storage tanks of various sizes, four (4) produced liquids tanks and one (1) produced liquids unloading rack.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2020 Actual Emissions
Carbon Monoxide (CO)	188.25	2.37
Nitrogen Oxides (NO _x)	252.38	1.66
Particulate Matter (PM _{2.5})	12.03	0.26
Particulate Matter (PM ₁₀)	12.03	0.26
Total Particulate Matter (TSP)	12.03	0.26
Sulfur Dioxide (SO ₂)	2.90	0.01
Volatile Organic Compounds (VOC)	10.08	3.21

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2020 Actual Emissions
Benzene	0.02	<0.01
Toluene	0.14	<0.01
Ethylbenzene	0.03	<0.01
Xylene	0.07	<0.01
n-Hexane	0.03	<0.02
Formaldehyde	2.01	<0.02
Other HAPs	0.16	<0.01
Total HAPs	2.46	<0.04

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

Title V Program Applicability Basis

This facility has the potential to emit 188.25 TPY of CO and 252.38 TPY of NO_x. 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	Particulate air pollution from combustion of fuel in indirect heat exchangers.
	45CSR6	Open burning prohibited.

	45CSR11	Standby plans for emergency episodes.
	45CSR13	NSR permit
	45CSR16	Standards of performance for new stationary sources
	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 60, Subpart JJJJ	RICE NSPS
	40 C.F.R. Part 60, Subpart KKKK	Turbine NSPS
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 63, Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR17	To Prevent and Control Particulate Matter Air Pollution from Material 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 (if any)
R13-2234B	11/15/21	

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

This renewal includes changes submitted as significant modification R30-00700100-2016 (SM01). The significant modification incorporates changes approved under R13-2234B, specifically condition 4.1.1.

- ❖ In Section 1.1, produced liquids tanks A03, A04, A05 and A09 and produced liquids unloading rack LR-1 were added to the Emissions Units table.

- ❖ In Section 1.2, the permit number and date of issuance were updated.
- ❖ The page numbering in the Table of Contents was updated.
- ❖ In Section 3.5.3., the US EPA contact information was updated and the contact info for electronic reporting to the DAQ was added to match the current boilerplate.
- ❖ In Section 3.5.5., the contact info for electronic reporting to the DAQ and US EPA was added to match the current boilerplate.
- ❖ In Section 3.5.6., the contact info for electronic reporting to the DAQ was added to match the current boilerplate.
- ❖ In Section 3.7.2., the section for 40 C.F.R. Part 60 Subpart OOOOa was revised to include the new tanks A03, A04, A05 and A09 and loading rack LR-1.
- ❖ The title for Section 4.0 was revised to include the emission point IDs for the new equipment.
- ❖ Section 4.1.1 was modified to list the revised permitted emission limitations which update errors and use more representative data to estimate low load operations.
- ❖ The tables in Section 4.2.2. were modified because permit application R13-2234B and renewal application R30-00700100-2022 included manufacturer and site specific data which is more accurate than the emission rates in Tables 2-2 and 2-3 of the letter from Columbia Gas to Steven R. Pursley dated January 30, 2013.
- ❖ In Section 5.1.3.(b), subsection 5.1.3.(b)(2) and 5.1.3.(b)(3) were deleted as a result of these sections being vacated from the rule.
- ❖ Section 5.1.4. was revised to include additional language for clarification.
- ❖ Section 5.4.1. was revised to eliminate item c which was reserved and also added additional information to the regulatory reference to be more specific.
- ❖ Section 5.5.2. was added to require the submittal of performance test reports for engine G05.

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 Dioxide - Emissions from Indirect Heat Exchangers.</i> WVDAQ has determined that 45CSR10 does not apply to natural gas fired engines.
45CSR21	<i>To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds:</i> The facility is not located in a designated VOC County. Therefore, this State Rule does not apply.

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 OOOO	<i>Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution.</i> The Storage Vessel requirements defined for transmission sources are not applicable to this site because there are no affected source storage vessels constructed or reconstructed after August 23, 2011 and on or before September 18, 2015 as stated in accordance with 40CFR§60.5365(e). No other affected sources were identified at this site.
40 C.F.R. Part 60 Subpart OOOOa	<i>Standards of Performance for Crude Oil and Natural 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, except A09, commenced construction prior to September 18, 2015 in accordance with the applicability criteria defined within [40CFR§60.5365a]. A09 commenced construction after September 18, 2015, and on or before November 16, 2020, but is not considered a storage vessel affected facility because its potential for VOC emissions is not equal to or greater than 6 tons per year (tpy) in accordance with the applicability criteria defined within [40CFR§60.5365a(e)(1)]. Promax software was used to calculate A09’s potential to emit as 0.24 tpy for VOCs. Affected sources evaluated are as follows: Compressors, Equipment Leaks, Pneumatic Controllers, and Storage Vessels.
40 C.F.R. Part 60 Subparts 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 40CFR§§60.110(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 below the applicability criteria of 19,813 gallons in capacity as stated in 40CFR§60.110b(a).
40 C.F.R. Part 60, Subpart Dc	<i>Standards of Performance for Steam Generating Units.</i> The fuel gas heater burner has a maximum design heat input capacity of less than 10 MMBtu/hr, which is below the applicability threshold defined within [40CFR§60.40c(a)]. Additionally, the heater is not a steam generating unit.
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 to the 04501, 04502, or 04503 turbines at this site because they were installed prior to the October 3, 1977 NSPS applicability date defined within 40CFR§60.330(b). Additionally, no modifications have occurred since the original installation.
40 C.F.R. Part 60 Subpart IIII	<i>Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.</i> The Compressor Station does not have any compression ignition internal combustion engines.
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 Compressor Station is not subject to Subpart HHH since it is not a major source of HAPs and it does not incorporate dehydration operations.
40 C.F.R. Part 63 Subpart YYYY	National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines does not apply to this station since it does not exceed major source HAP thresholds.
40 C.F.R. Part 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters does not apply to this station since it does not exceed major source HAP thresholds.

40 C.F.R. Part 63 Subpart JJJJJ	<i>National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources.</i> The facility is not subject to 40 C.F.R. Part 63 Subpart JJJJJ since the fuel gas heater (045H1) is not a boiler, but a process heater, which is not regulated under this source category.
40 C.F.R. Part 64	There are no add-on controls, so this is not applicable per 40 CFR§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: February 15, 2022
Ending Date: March 17, 2022

Point of Contact

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

Dan Roberts
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41902
Daniel.p.roberts@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)

On March 14, 2022, Justin Leary of the EPA sent an email stating that “EPA has reviewed the draft permit and the fact sheet and has no comments.”