West Virginia Department of Environmental Protection Division of Air Quality





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

Permit Number: **R30-02100001-2022** Application Received: **January 20, 2022** 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: UTM Coordinates: Directions: Glenville, Gilmer County, West Virginia
519.7 km Easting • 4,308.5 km Northing • Zone 17
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]			
<b>Regulated Pollutants</b>	<b>Potential Emissions</b>	2021 Actual Emissions	
Carbon Monoxide (CO)	273.14	72.45	
Nitrogen Oxides (NO <sub>X</sub> )	1,235.25	277.92	
Particulate Matter (PM <sub>2.5</sub> )	17.93	Not reported	
Particulate Matter (PM <sub>10</sub> )	17.93	4.65	
Total Particulate Matter (TSP)	17.93	6.50	
Sulfur Dioxide (SO <sub>2</sub> )	0.39	0.35	
Volatile Organic Compounds (VOC)	59.43	21.13	

$PM_{10}$ is a component of TSP.			
Hazardous Air Pollutants	Potential Emissions	2021 Actual Emissions	
Benzene	0.72	0.01	
Toluene	0.43	0.05	
Ethylbenzene	0.06	0.01	
Xylene	0.14	0.03	
n-Hexane	0.23	0.02	
Formaldehyde	20.82	4.53	
Acetaldehyde	2.90	0.02	
Other HAPs	4.76	0.00	
Total HAPs	30.06	4.67	

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

# **Title V Program Applicability Basis**

This facility has the potential to emit 1,235.25 tons/yr of NOx, 273.14 tons/yr of CO, 20.82 tons/yr of Formaldehyde and 30.06 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
State Only:		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	Date of	Permit Determinations or Amendments That
Consent Order Number	Issuance	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**

This is the fourth renewal of the Title V permit. The following changes to the Title V permit were made as part of this renewal:

• Title V Boilerplate changes:

Condition 2.11.4. – The reference notation was changed from 45CSR§30-2.39 to 45CSR§30-2.40 because this definition was renumbered in 45CSR30.

Condition 2.22.1. - The reference notation was changed to delete 45CSR38 because it has been repealed.

Condition 3.5.3. - The EPA contact information and address were updated.

# • 40 C.F.R. 63 Subpart YYYY:

The turbines (Emission point IDs- T01&T02) are classified as affected sources under the NESHAP for stationary combustion turbines promulgated under 40 C.F.R. 63 Subpart YYYY. These turbines are classified as new lean premix gas-fired turbines. Per 40 C.F.R. §63.6095(d), U.S. EPA stayed the standards for a new or reconstructed stationary turbine that is either a lean premix gas-fired or diffusion flame gas-fired stationary combustion turbine. U.S. EPA has removed this stay recently, so T01 and T02 are now subject to these requirements. These turbines do not use an oxidation catalyst to comply with Subpart YYYY and do not use distillate oil. Applicable requirements were included in section 10 of this permit renewal.

- 40 C.F.R. 63 Subpart ZZZZ was updated on August 10, 2022 to remove the vacated sections (40 C.F.R. §§63.6640(f)(2)(ii) and (iii)). Therefore condition 5.1.2 was corrected.
- 40 C.F.R. 60 Subpart JJJJ was updated on August 10, 2022 to remove the vacated sections (40 C.F.R. §§60.4243(d)(2)(ii) and (iii)). Therefore condition 7.1.4 was corrected.
- 40 C.F.R. 60 Subpart JJJJ was updated on August 10, 2022 to remove the vacated sections. Therefore condition 7.5.1 was corrected accordingly.
- EPA removed the vacated sections in the latest version of 40 C.F.R. 63 Subpart ZZZZ. 40 C.F.R. §63.6650(h) only applies to facilities at an area source of HAPs. Since this facility is a major source of HAPs, reporting requirements in condition 5.5.1 do not apply and were removed from this permit renewal.
- Citations in conditions 6.1.5, 6.5.4 and 9.1.1 were corrected.

# **Non-Applicability Determinations**

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

45CSR4	To Prevent and Control the Discharge of Air Pollutants into the Open Air Which Cause or Contributes to an Objectionable Odor or Odors: 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</i> <i>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</i> <i>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	Standards of Performance for Stationary Compression Ignition Internal
Ш	<i>Combustion Engines</i> : There are no compression ignition engines at this facility.
40 C.F.R. Part 60 Subpart	Standards of Performance for Crude Oil and Natural Gas Production,
0000	Transmission, and Distribution for which Construction, Modification, or Reconstruction Commenced after August 23, 2011 and on or before
	September 18, 2015. 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	Standards of Performance for Crude Oil and Natural Gas Facilities for
OOOOa	which Construction, Modification, or Reconstruction Commenced after
	September 18, 2015. 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	Standards of Performance for Steam Generating Units: 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	Standards of Performance for Petroleum Liquid Storage Vessels. All
and Ka	tanks at the station are below the applicability criteria of 40,000 gallons in capacity as stated in $4088$ CEP60 110(a) and 60 110a(a)
40 C.F.R. Part 60 Subpart Kb	in capacity as stated in 40§§CFR60.110(a) and 60.110a(a). Standards of Performance for Volatile Organic Liquid Storage Vessels.
10 Sit in Furt of Subpart ISD	All tanks at the station are between 75 m <sup>3</sup> (19,813 gallons) and 151 m <sup>3</sup>
	(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	Standards of Performance for Equipment Leaks of VOC From Onshore
ККК	<i>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	National Emission Standards for Hazardous Air Pollutants From Natural
ННН	<i>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 facility does not have any pollutant specific emissions units (PSEU)
	that satisfied all of the applicability criteria requirements of 40 CFR $\frac{64}{2}$ (a). There have been no changes to any aquiment at the facility
	§64.2(a). There have been no changes to any equipment at the facility since the last renewal that have resulted in a source satisfying the
	applicability requirements of 40 CFR §64.2(a) and becoming subject to
	CAM.

# **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:	October 20, 2022
Ending Date:	November 21, 202

#### **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. 41283 • 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.

21, 2022

#### **Response to Comments (Statement of Basis)**

None.