

Fact Sheet



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

Permit Number: **R30-08300017-2023**
Applications Received: **June 28, 2022**
Plant Identification Number: **03-054-083-00017**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Glady Compressor Station**
Mailing Address: **1700 MacCorkle Avenue SE, Charleston, WV 25314**

Physical Location: Glady, Randolph County, West Virginia
UTM Coordinates: 615.52 km Easting • 4,293.19 km Northing • Zone 17
Directions: From US Route 33 East, turn right on Secondary Route 27 at Alpena.
Proceed approximately 10 miles to Glady, turn left on Route 22 and
travel approximately 1 mile to the station located on the left side of road.

Facility Description

The Glady 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 three (3) 1,320 hp, Ingersoll-Rand 48KVS, 4SLB reciprocating engines; one (1) 325 hp, Waukesha F2895GL, 4SRB reciprocating engine/generator; one (1) 608 hp, Waukesha VGF-H24GLD, 4SLB reciprocating engine/generator; one (1) 312 mmscf/day Barnhart Tech TEG dehydration unit; one (1) 5.74 mmBtu/hr NATCO SVH-3 dehydrator flare; two (2) 15.0 mmBtu/hr NATCO line heaters; two (2) 1.0 mmBtu/hr NATCO SB/18-14 TEG reboilers; one (1) 1.512 mmBtu/hr Peerless Model # 211A-10-N heating system boiler; one (1) pipeline/storage field liquids storage tank; five (5) methanol storage tanks; and one (1) loading rack .

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2021 Actual Emissions
Carbon Monoxide (CO)	163.88	95.88
Nitrogen Oxides (NO _x)	1,128.23	498.34
Particulate Matter (PM _{2.5})	3.51	1.20
Particulate Matter (PM ₁₀)	3.51	1.20
Total Particulate Matter (TSP)	3.51	1.20
Sulfur Dioxide (SO ₂)	1.73	0.1
Volatile Organic Compounds (VOC)	35.68	12.90

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2021 Actual Emissions
Acetaldehyde	1.50	Not reported
Benzene	2.18	0.01
Ethylbenzene	0.69	0.02
Ethylene Glycol	<0.01	Not reported
Formaldehyde	8.93	4.06
Hexane	0.52	0.02
Methanol	1.74	0.3
Toluene	2.29	0.01
Xylene (Mixed Isomers)	1.04	0.02
Other HAPs	1.65	0.0
Total HAPs	20.55	4.43

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

Title V Program Applicability Basis

This facility has the potential to emit 1,128.23 TPY of NO_x and 163.88 TPY of CO. 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 45CSR6 45CSR10 45CSR11 45CSR13 WV Code § 22-5-4 (a) (14) 45CSR16 45CSR30 45CSR34 40 C.F.R. Part 60, Subpart Dc 40 C.F.R. Part 61 40 C.F.R. Part 63, Subpart ZZZZ 40 C.F.R. Part 82, Subpart F	PM emissions from Indirect Heat Exchangers Open burning prohibited. SO ₂ emissions from Indirect Heat Exchangers Standby plans for emergency episodes. Permits for construction/modification The Secretary can request any pertinent information such as annual emission inventory reporting. NSPS requirements Operating permit requirement. Emission Standards for HAPs Steam generating units NSPS Asbestos inspection and removal RICE MACT Ozone depleting substances
State Only:	45CSR4 45CSR17	No objectionable odors. Control 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>
R13-2218E	May 17, 2021	

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.

- Typos were corrected in Conditions 5.2.1 (reference to the oil change requirements in Table 2d was changed from 6.1.2 to 5.1.2) and 7.1.1 (FL3 annual emission limit for hexane was changed from 0.06 to 0.08 TPY).

Non-Applicability Determinations

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

- 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.
- 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.”
- 40 C.F.R. 60 Subparts K and Ka- Standards of Performance for Storage Vessels for Petroleum Liquids.** All tanks at Gladly station are below 40,000 gallons in capacity. Since the applicability criteria in §§60.110(a) and 60.110a(a) are not met, the regulations are not applicable.
- 40 C.F.R. 60 Subpart Kb—Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.** All tanks (except Tank A21) at Gladly station are less than 75 m³ in capacity. Since the vessels do not meet applicability criterion at §60.110b(a), the regulation does not apply to these tanks. The Title V permit R30-08300017-2012 described Tank A25 as being 30,000-gal capacity and subject to the NSPS recordkeeping requirements. However, in 10/5/2017 technical correspondence, the permittee confirmed that Tank A25 is a 10,000-gal methanol tank, and is not subject to the regulation due to its capacity. The permittee confirmed in the correspondence that there are no 30,000-gal tanks other than A21. Tank A21 has a volume between 75 m³ and 150 m³, and has a maximum true vapor pressure less than 3.5 kPa. As such, it meets the second set of criteria in §60.110b(b), which are excepted from applicability in §60.110b(a).
- 40 C.F.R. 60 Subpart KKK - Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant.** Gladly 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.
- 40 C.F.R. 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.** Gladly Compressor Station does not have any compression ignition internal combustion engines; therefore, it does not meet the applicability criteria in 40 C.F.R. §60.4200(a).

- g. **40 C.F.R. 60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.** All engines at the Glady Compressor Station were constructed, reconstructed, or modified prior to the June 12, 2006 applicability date listed in 40 C.F.R. §§60.4230(a)(4) and (5).
- h. **40 C.F.R. 60 Subpart OOOO - 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.** Since Methanol Storage Tanks A25, A26 and A27 were constructed prior to August 23, 2011, and Methanol Storage Tanks A30 and A32 were constructed after September 18, 2015, requirements of this subpart are not applicable to these tanks.
- i. **40CFR60 Subpart OOOOa -Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced after September 18, 2015.** This subpart applies to the owners or operators of one or more of the onshore affected facilities, including a storage vessel affected facility that commenced construction, reconstruction or modification after September 18, 2015 but before November 16, 2020 (as per 40 C.F.R. §60.5365a(e)(1)), or after November 16, 2020 (as per 40 C.F.R. §60.5365a(e)(2)), if its potential for VOC emissions is equal to or greater than 6 TPY. Subpart OOOOa is not applicable to the Methanol Storage Tanks A25, A26 and A27 because they were constructed before the applicability date of September 18, 2015. Methanol Storage Tanks A30 and A32 were constructed in 2021, but their PTE for VOCs is below 6 TPY because a combined VOC emission limit for all Methanol Storage Tanks (including tanks A30 and A32) listed under requirement 8.1.2 is 1.03 TPY. Therefore, requirements of this subpart are not applicable to Methanol Storage Tanks A25, A26, A27, A30 and A32.
- j. **40 C.F.R. 63 Subpart HH – National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities.** This subpart applies to production facilities according to 40 C.F.R. §63.760. Since Glady Compressor Station is a transmission facility, this subpart is not applicable.
- k. **40 C.F.R. 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), this subpart applies to owners and operators of natural gas transmission and storage facilities that are major sources of hazardous air pollutant (HAP) emissions as defined in §63.1271. Since Glady Compressor Station is not a major source of HAP, this subpart is not applicable.
- l. **40 C.F.R. 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.** According to 40 C.F.R. §63.7485, this subpart applies to a boiler or process heater as defined in §63.7575 that is located at, or is part of, a major source of HAP. Since Glady Compressor Station is not a major source of HAP, this subpart is not applicable.
- m. **40 C.F.R. 63 Subpart JJJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources.** According to 40 C.F.R. §63.11193, this subpart applies to a boiler as defined in §63.11237 that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in §63.2, except as specified in meet the exemption for a gas-fired boiler in §63.11195(e). Consequently, this subpart is not applicable
- n. **40 C.F.R. Part 64 – Compliance Assurance Monitoring -** There have been no changes in this permit (which would trigger CAM review) since the previous renewal was issued, so CAM remains not applicable to any emission unit listed in the renewal application.

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: April 4, 2023

Ending Date: May 4, 2023

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
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)

Although there were no comments received during the "Draft" public comment period or during the "Proposed" EPA comment period, a revised version of WV Rule 30 (45CSR30) became effective on March 31, 2023. Due to the Rule 30 revisions, the Title V boilerplate has been revised. Consequently, the revisions have been made to the final permit. The revisions to the permit are as follows:

- **Condition 2.1.3** - The section of Rule 30 that defines Secretary changed in a previous version of Rule 30 and we failed to update this condition. Also, in the recently revised Rule 30, the word "such" was removed.
- **Conditions 2.17, 3.5.7, and 3.5.8.a.1** - The section for Emergency was removed and replaced with Reserved in condition 2.17. Section 5.7 of Rule 30 which pertained to emergencies and affirmative defense was removed in the revised Rule 30.
- **Condition 3.5.4** - Under the revised Rule 30, certified emissions statements are no longer required to be submitted. Facilities have been submitting their emissions data in SLEIS and paying fees based on their SLEIS submittal, so this requirement was no longer needed.
- **Condition 3.5.8.a.2** - Under the revised Rule 30, "telefax" was replaced with "email".