

Fact Sheet



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

Permit Number: **R30-05100216-2024**

Application Received: **April 18, 2024**

Plant Identification Number: **051-00216**

Permittee: **Columbia Gas Transmission, LLC**

Facility Name: **Lone Oak Compressor Station**

Mailing Address: **1700 MacCorkle Avenue, SE, Charleston, WV 25314**

Physical Location: Lone Oak, Marshall County, West Virginia
UTM Coordinates: 535.8 km Easting • 4,414.8 km Northing • Zone 17
Directions: From the town of Lone Oak, travel south on Waynesburg Pike for approximately 1.7 miles. The Compressor Station will be on the left.

Facility Description

Columbia Gas Transmission, LLC is a transmission compressor station for a natural gas pipeline system. Columbia Gas Transmission, LLC is covered by SIC Code of 4922 and NAICS Code of 486210. The facility consists of four (4) Solar Mars 100 Combustion Turbines, one (1) 1,175-hp Waukesha emergency generator, two (2) process heaters with heat input rating of 1.316 MMBtu/hr each, forty (40) catalytic space heaters (0.072 MMBtu/hr each), one (1) 500 gallon and one (1) 1,000 gallon condensate (pipeline fluids) storage tank and one (1) 1,000 gallon wastewater tank. The facility has the potential to operate twenty-four (24) hours a day for seven (7) days per week and fifty-two (52) weeks per year.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2023 Actual Emissions
Carbon Monoxide (CO)	189.30	90.52
Nitrogen Oxides (NO _x)	128.61	83.91
Particulate Matter (PM _{2.5})	15.79	2.61
Particulate Matter (PM ₁₀)	15.79	2.61
Total Particulate Matter (TSP)	31.55	9.10
Sulfur Dioxide (SO ₂)	1.64	0.96
Volatile Organic Compounds (VOC)	25.59	18.46

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2023 Actual Emissions
Acetaldehyde	0.10	0.05
Acrolein	0.02	0.02
Benzene	0.03	0.02
Ethyl Benzene	0.07	0.05
Formaldehyde	1.58	0.97
Toluene	0.27	0.18
Xylene	0.13	0.08
Other HAPs	0.51	0.03
Total HAPs	2.71	1.40

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

Title V Program Applicability Basis

This facility has the potential to emit 128.61 tons per year of NO_x and 189.30 tons per year 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	Particulate matter and opacity limits for indirect heat exchangers
	45CSR6	Open burning prohibited.

	45CSR11	Standby plans for emergency episodes.
	45CSR13	NSR Permits
	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 Hazardous Air Pollutants
	40 C.F.R. Part 60, Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
	40 C.F.R. Part 60, Subpart KKKK	Standards of Performance for Stationary Combustion Turbines
	40 C.F.R. Part 60, Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 and On or Before December 6, 2022.
	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 (RICE)
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.

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>)
R13-3254B	December 17, 2020	

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 first renewal of the Title V permit for this facility. The only changes to the facility since the issuance of the initial Title V permit were addressed in R30-05100216-2019(MM01). The following changes were made as part of this Title V Renewal:

3.0 Facility-Wide Requirements

- Updated to the most recent boilerplate language.

4.0 Source-Specific Requirements

This section has applicable requirements from R13-3254, 45CSR2, 40 C.F.R. 60 Subpart KKKK, 40 C.F.R. 60 Subpart JJJJ, 40 C.F.R. 60 Subpart OOOOa, and 40 C.F.R. 63 Subpart ZZZZ.

- R13-3254 has not been modified since the issuance of R13-3254B which was addressed in R30-05100216-2019(MM01).
- 45CSR2 was updated on June 1, 2024 but there were no changes to the applicable requirements of this section.
- 40 C.F.R. 60 Subpart KKKK was amended on October 7, 2020, but none of the applicable requirements included in this section were affected.
- 40 C.F.R. 60 Subpart JJJJ was amended on June 29, 2021, August 10, 2022, and January 24, 2023. This resulted in the following condition being updated: 4.1.3.c.
- 40 C.F.R. 63 Subpart ZZZZ was amended on August 10, 2022 and March 29, 2023, but none of the applicable requirements included in this section were affected.
- 40 C.F.R. 60 Subpart OOOOa was amended on September 14, 2020, September 15, 2020 and March 8, 2024. This resulted in the following conditions being updated: 4.1.7, 4.4.6, and 4.5.2.

Non-Applicability Determinations

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

- a. 40 C.F.R. Part 60 Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. Affected sources in Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) are steam operating units that have a maximum design heat input between 10 MMBtu/hr and 100 MMBtu/hr. The fuel gas heaters are less than 10 MMBtu/hr. Therefore, they are not subject to the standards under Subpart Dc.
- b. 40 C.F.R. Part 60 Subpart OOOO - Subpart OOOO (Standards of Performance for Crude Oil and Natural Gas Production) establishes standards for certain process equipment (constructed, modified or reconstructed after August 23, 2011, and on or before September 18, 2015) at oil and natural gas production sites. All the emission units at the site were constructed after September 18, 2015. Therefore, they are not affected sources and not subject to the performance standards of Subpart OOOO per 40 CFR§60.5365.

- c. 40 C.F.R. Part 60 Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022. This subpart establishes emission standards and compliance schedules for the control of the pollutant greenhouse gases (GHG). The greenhouse gas standard in this subpart is in the form of a limitation on emissions of methane from affected facilities in the crude oil and natural gas source category that commence construction, modification, or reconstruction after December 6, 2022. This subpart also establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO₂) emissions from affected facilities in the crude oil and natural gas source category that commence construction, modification, or reconstruction after December 6, 2022. All emission units at this facility were constructed before December 6, 2022. Therefore, they are not affected sources and not subject to the performance standards of Subpart OOOOb per 40 CFR§60.5365b.
- d. 40 C.F.R. part 63 Subpart JJJJJ - This subpart covers boilers located at an area source of HAPs. The heaters are natural gas fired, which are not listed as a subcategory in 40 CFR §63.11200 and are exempt per 40 CFR §63.11195(e). Thus, this regulation is not applicable to the heaters.
- e. 40 C.F.R. 64 - Compliance Assurance Monitoring. The only listed control devices at this facility are the Combustion Controls on the Solar Mars 100 Combustion Turbines. Combustion Controls fall under passive control measures which are not included under the definition of control devices in 40 C.F.R. 64. Therefore, the facility has no pollutant specific emission units that could be subject to 40 C.F.R. 64.

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: August 13, 2024
Ending Date: September 12, 2024

Point of Contact

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

Robert Mullins
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41286
Robert.A.Mullins@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)

The following boilerplate changes have been made to the permit. These changes to the boilerplate became effective September 23, 2024.

- **Condition 3.1.6.** – Revised the citation to refer to the current version of the WV Code.
- **Condition 3.3.1.** – Revised the citation to refer to the current version of the WV Code.
- **Condition 3.3.1.b.** – Added “If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit shall be revised in accordance with 45CSR§30-6.4 or 45CSR§30-6.5 as applicable.”