

Fact Sheet



For Draft/Proposed Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-01700162-2025**

Application Received: **October 30, 2024**

Plant Identification Number: **03-54-01700162**

Permittee: **Columbia Gas Transmission, LLC**

Facility Name: **Sherwood Compressor Station**

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

Physical Location:	West Union, Doddridge County, West Virginia
UTM Coordinates:	523.0 km Easting • 4,346.7 km Northing • Zone 17
Directions:	From Smithburg, WV, head southwest on Smithbury Street towards Smithton Road and make a left. In approximately 0.5 miles, keep left to continue to County Route 50/22. In approximately 0.2 miles, turn left onto US-50 West and then left onto Snowbird Road. At the end of Snowbird Road, turn right onto Route 18. The compressor station will be on the right in approximately 0.5 miles.

Facility Description

The Sherwood Compressor Station is a transmission compressor station for a natural gas pipeline system. The facility consists of two 7,417-HP Solar Taurus 60 turbines, two 15,427-HP Solar Mars 100 turbines, one 1,175-HP Waukesha VGF-P48GL emergency generator RICE, one 1.5-mmBTU/hr process heater, one 0.80-mmBTU/hr process heater, catalytic heaters with a total maximum design heat input of 2.88 mmBTU/hr, one 2,056-gallon pipeline liquids storage tank, and one 1,000-gallon wastewater storage tank. The facility has the potential to operate twenty-four hours per day for seven days per week and fifty-two weeks per year.

SIC: 4922, NAICS: 486210

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2024 Actual Emissions
Carbon Monoxide (CO)	240.13	79.78
Nitrogen Oxides (NO _x)	102.13	72.59
Particulate Matter (PM _{2.5})	11.78	2.41
Particulate Matter (PM ₁₀)	11.78	2.41
Total Particulate Matter (TSP)	11.78	2.41
Sulfur Dioxide (SO ₂)	1.28	0.81
Volatile Organic Compounds (VOC)	23.94	13.16
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2024 Actual Emissions
Formaldehyde	1.40	0.89
Other HAPs	0.65	--
Total HAPs	2.05	0.89

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

Title V Program Applicability Basis

This facility has the potential to emit 240.13 tpy of Carbon Monoxide and 102.13 tpy of Nitrogen Oxides. 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	Control of Particulate Matter Air Pollution from the Combustion of Fuel in Indirect Heat Exchangers.
	45CSR6	Control of Air Pollution from Combustion of Refuse.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Requirements for NSR Permits.
	45CSR16	Standards of Performance for New Stationary Sources.
	WV Code § 22-5-4 (a) (15)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Requirements for Operating Permits.

	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 Emissions 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 Materials 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
R13-3313D	July 2, 2024

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

The following revisions have been made to the Title V operating permit:

1. Section 1.0. – Emission Units and Active R13, R14, and R19 Permits
 - a. On June 12, 2024 and July 31, 2024, Columbia Gas Transmission, LLC submitted notices that the Solar Mars 100 turbines T3 and T4 were to be replaced with like-kind units. The potential emissions did not change as a result of this replacement, and the turbines remain subject to the applicable requirements of R13-3313D and 40 C.F.R. Part 60 Subpart KKKK.

Operation of the replacement turbine T3 commenced on July 17, 2024, and operation of the replacement turbine T4 commenced on October 9, 2024. Due to these changes, the “year installed” listed in the Emission Units Table was updated to 2024 for the turbines T3 and T4.

- b. In accordance with the application for R30-01700162-2025, the design capacity of the pipeline liquids storage tank A1 was corrected from 2,000 gallons to 2,056 gallons. The tank is an insignificant activity and is not subject to any applicable requirements.
- c. A 1,000-gallon wastewater storage tank was added to the Emission Units Table (Emission Unit ID: A3, Emission Point ID: A03). The storage tank was placed in service on January 25, 2019. The storage tank has minimal emissions of criteria pollutants and hazardous air pollutants (the potential emissions of VOCs and HAPs are each estimated to be below 0.01 tpy) and is not subject to any applicable requirements. Therefore, the wastewater storage tank is an insignificant activity.

2. Section 3.0. – Facility-Wide Requirements

- a. The citation of Condition 3.1.6. was revised to refer to the current version of the WV Code.
- b. With the issuance of R30-01700162-2020 (MM02) and (MM03), the requirements of Condition 3.1.9. were reserved. This condition was removed from this operating permit renewal, and the subsequent requirement was relabeled as Condition 3.1.9.
- c. The citation of Condition 3.3.1. was revised to refer to the current version of the WV Code.
- d. The following has been added to Condition 3.3.1.b.: “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.”

3. Section 4.0. – Turbines

- a. With the issuance of R30-01700162-2020 (MM02) and (MM03), the requirements of Condition 4.1.5. were removed from the permit. In this operating permit renewal, this condition was removed, and the subsequent requirements were relabeled Conditions 4.1.5. to 4.1.7.

4. Section 5.0. – Emergency Generator RICE

- a. For a stationary SI ICE to be considered an emergency stationary ICE under 40 C.F.R. Part 60 Subpart JJJJ, the engine must be operated according to the provisions of §60.4243(d). These requirements are included in Condition 5.1.7. of the operating permit and, in accordance with Subpart JJJJ, were updated as follows:
 - i. The references to emergency demand response were removed.
 - ii. The requirements of 40 C.F.R. §§60.4243(d)(2)(ii) and (iii) were vacated and, therefore, the reference to these provisions were removed.
- b. Condition 5.4.1.a. contains the recordkeeping requirements of 40 C.F.R. §60.4245(a). In paragraph a.3. of this condition, the reference to 40 C.F.R. Part 90 was removed. The provisions of Part 90 were moved to Part 1054, with additional testing and compliance provisions in Parts 1065 and 1068.
- c. Condition 5.5.1.b. requires the permittee to submit a copy of each performance test conducted according to 40 C.F.R. §60.4244 within 60 days after the test has been completed. This requirement was updated to include the information that the report must contain for each of the testing methods specified in 40 C.F.R.

§60.4245(d). Additionally, the requirement to submit reports electronically according to 40 C.F.R. §60.4245(f) was added to this condition.

d. The following applicable requirements were added to the operating permit under paragraphs c. to e. of Condition 5.5.1.:

- i. Paragraph c. contains the conditional reporting requirements of 40 C.F.R. §60.4245(e), which requires the permittee to submit annual reports for an emergency stationary SI ICE with a maximum engine power greater than 100 HP that is operated for the purpose specified in 40 C.F.R. §60.4243(d)(3)(i) (Condition 5.1.7.c.1. of this operating permit).
- ii. Paragraph d. contains the provisions of 40 C.F.R. §60.4245(f), which requires the permittee to submit the results of each performance test within 60 days after completing each test.
- iii. Paragraph e. contains the provisions of 40 C.F.R. §60.4245(g), which requires notifications and reports to be submitted electronically via the Compliance and Emissions Data Reporting Interface (CEDRI).

5. Section 7.0. – 40CFR60, Subpart OOOOa Requirements

a. The requirements of Condition 7.1.1. have been updated in accordance with the amendments to 40 C.F.R. §60.5397a.

- i. As an alternative to §60.5397a, the permittee may comply with the Subpart OOOOb requirements for the fugitive emissions components in §60.5398b. A reference to these requirements was added to the introductory paragraph of this condition.
- ii. The procedures for calibration of monitoring equipment in §60.5397a(c)(8)(iii) were added to this condition under paragraph c.8.iii.
- iii. In accordance with §60.5397a(d), the required elements of the fugitive emissions monitoring plan were updated in paragraph d. of this condition.
 1. The requirements for a sitemap and a defined observation path were removed from paragraphs d.1. and d.2. of this condition.
 2. Paragraph d.1. now specifies that the monitoring plan must include procedures to ensure that all fugitive emissions components are monitored during each survey when optical gas imaging is used to determine fugitive emissions.
 3. Paragraphs d.3. and d.4. of the previous operating permit were relabeled as paragraphs d.2. and d.3., respectively.
- iv. In paragraphs f.1. and f.2., the deadline to conduct the initial monitoring survey was revised from within 60 days of startup to within 90 days of startup.
- v. In paragraph g., the requirements for monitoring surveys were updated in accordance with §60.5397a(g).
 1. The phrase “within a company-defined area” was removed from paragraphs g.1. and g.2.
 2. The semiannual monitoring surveys required under paragraph g.1. must be conducted at least 4 months apart and no more than 7 months apart.

3. The §60.5397a(g)(5) exception to the requirements of §60.5397a(g)(1) was added to the operating permit under paragraph g.5. Paragraph g.5. of the previous operating permit was relabeled as paragraph g.6.
- vi. Paragraph h. contains the repair requirements for identified sources of fugitive emissions. These requirements were revised as follows:
 1. Under §§60.5397a(h)(1) and (h)(2), the first attempt at repair must be made no later than 30 calendar days after detection of the fugitive emissions and the repair must be completed no later than 30 calendar days after the first attempt at repair.
 2. The delay of repair requirements were revised in accordance with §60.5397a(h)(3).
 3. Each identified source of fugitive emissions must be resurveyed to complete the repair according to the requirements in §60.5397a(h)(4).
- b. As specified in §60.5415a(h)(2), the phrase “or replace” was removed from Condition 7.1.3.b.
- c. Under §60.5370a(b), affected facilities subject to Subpart OOOOa must, at all times, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. This requirement was added to the operating permit as Condition 7.1.4.
- d. In accordance with §60.5420a(c)(15), the recordkeeping requirements for the collection of fugitive emissions components were updated in paragraphs a. through d. of Condition 7.4.1. Additionally, the recordkeeping requirements for the alternative fugitive emissions standards §60.5399a and §60.5398b were added to the operating permit as paragraphs e. and f. of this condition.
- e. Condition 7.5.1. was revised as follows:
 - i. In paragraph b. of this condition, the reporting requirements for the collection of fugitive emissions components were updated according to §60.5420a(b)(7).
 - ii. The electronic reporting requirements of §60.5420a(b)(11) were added to the operating permit as paragraph c. of this condition.

Non-Applicability Determinations

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

1. **40 C.F.R. Part 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units** – The maximum design heat input of each heater is less than 10 mmBTU/hr. Therefore, according to 40 C.F.R. §60.40c(a), this rule does not apply.
2. **40 C.F.R. Part 60 Subpart OOOO – Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After August 23, 2011 and On or Before September 18, 2015** – The equipment at the facility was installed after the applicability date specified in 40 C.F.R. §60.5365. Therefore, this rule does not apply.
3. **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**
 - a. Except for the turbines T3 and T4, the equipment at the facility was installed prior to the Subpart OOOOb applicability date specified in 40CFR§60.5365b and, therefore, is not subject to this rule.

- b. The replacement of the turbines T3 and T4 does not meet the definition of a modification to a compressor station specified in 40CFR§60.5365b(i)(3), and, therefore, the facility is not subject to the Subpart OOOOb provisions for fugitive emissions components at a compressor station.
 - c. The centrifugal compressors driven by the turbines T3 and T4 were not replaced, and, therefore, the Subpart OOOOb provisions for centrifugal compressor affected facilities are inapplicable.
4. **40 C.F.R. Part 64 – Compliance Assurance Monitoring** – The emission units at the Sherwood Compressor Station are not operated with any control devices and do not have uncontrolled emissions greater than the Title V major source thresholds. Therefore, per §§64.2(a)(2) and (a)(3), CAM is inapplicable to the emission units listed in Section 1.1. of the operating permit.

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 29, 2025

Ending Date: September 29, 2025

Point of Contact

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

Sarah Barron
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/414-1915
sarah.k.barron@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)

Not applicable.