

Fact Sheet



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

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on July 29, 2022.

Permit Number: **R30-05100100-2022**
Application Received: **April 29, 2025**
Plant Identification Number: **03-54-051-00100**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Adaline Compressor Station**
Mailing Address: **1700 MacCorkle Avenue SE, Charleston, WV 25314**

Permit Action Number: *MM03* Revised: *August 26, 2025*

Physical Location:	Cameron, Marshall County, West Virginia
UTM Coordinates:	530.456 km Easting • 4,401.860 km Northing • Zone 17
Directions:	From WV-2 N, travel 4.5 miles and turn right onto Proctor Creek Road. Travel 2.2 miles and take a slight right onto St. Joseph Baker Hill. Travel 2.2 miles and take a sharp left to stay on St. Joseph Baker Hill. Travel 5.2 miles and turn right onto Fish Creek Road. In 5.8 miles, the compressor station is on the left.

Facility Description

The Adaline Compressor Station is a natural gas transmission facility. The compressor station has the capacity to operate twenty-four hours per day, seven days per week, fifty-two weeks per year. The station consists of two 2,000-HP Clark TLA-6, 2SLB engines; one 880-HP Waukesha VGF-L36GL, 4SLB emergency engine; one 3,700-HP Caterpillar G3612, 4SLB engine; one 1.615-mmBTU/hr line heater; three 0.55-mmBTU/hr reboiler heaters; 2.88 MMBtu/hr heaters; and three DEG dehydration units rated at

117-mmscf/d each, all of which are fueled by natural gas. The facility also has five pipeline liquids tanks and one methanol storage tank.

Emissions Summary

This modification results in the following emission changes:

Pollutant	MM02 PTE (tpy)	MM03 PTE (tpy)	Change in PTE (tpy)
VOC	40.02	24.22	-15.79
NO _x	858.27	497.91	-360.35
CO	159.24	116.63	-42.61
PM/PM ₁₀ /PM _{2.5}	12.76	7.92	-4.84
SO ₂	0.36	0.22	-0.14
Methanol	0.97	0.70	-0.27
Formaldehyde	16.35	10.21	-6.14
Hexane	0.35	0.29	-0.05
Benzene	0.58	0.37	-0.21
Toluene	0.34	0.23	-0.12
Ethylbenzene	0.04	0.03	-0.01
Xylene	0.12	0.09	-0.03
2,2,4 - Trimethylpentane	0.25	0.16	-0.09
Acetaldehyde	3.04	2.18	-0.86
Acrolein	2.64	1.78	-0.85
1,3 - Butadiene	0.24	0.15	-0.09
Other HAPs	7.22	7.05	-0.17
Total HAPs	32.14	23.24	-8.90

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 116.63 tpy of Carbon Monoxide, 497.91 tpy of Nitrogen Oxides, and 10.21 tpy of Formaldehyde. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, and over 10 tons per year of a single HAP, 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.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR13	NSR Permits
	45CSR30	Operating permit requirement.

State Only:	N/A
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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

The active permits/consent orders affected by this modification are as follows:

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2149F	May 6, 2025	

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 modification is to remove three (3) 880-hp compressor RICE units, one (1) 440-hp emergency generator RICE, one (1) 1,080-hp turbine engine/centrifugal compressor, one (1) 3.48-MMBtu/hr boiler, one (1) 2,000-gal pipeline liquids tank, and one (1) 1.0-MMBtu/hr natural gas heater. The modification also added heaters with a total rating of 2.88 MMBtu/hr and a pipeline liquids tank with a design capacity of 5,014 gallons. The changes are detailed as follows:

1.1. Emission Units

- Removed emission unit BLR4, the 3.48-MMBtu/hr boiler.
- Removed emission unit HTR2, the 1.0-MMBtu/hr natural gas heater.
- Renamed line heater HTR3 to be HTR4.
- Added the 2.88 MMBtu/hr heaters as HTR5.
- Removed emission units 08101, 08102, and 08103, the three (3) 880-hp compressor RICE units.
- Removed emission unit 081G3, the 440-hp emergency generator RICE.
- Removed emission unit 08107, the 1,080-hp turbine engine/centrifugal compressor.
- Removed emission unit A08, a 2,000 gal pipeline liquids storage tank.
- Added emission unit A21, a 5,014 gal pipeline liquids tank.

3.0 Facility-Wide Requirements

- Updated the citation of condition 3.4.1 by removing 081G3 and changing HTR3 to HTR4.
- Updated permit shield condition 3.7.2 to account for the removal of equipment

4.0 Miscellaneous Indirect Natural Gas Heaters and Boilers less than 10 MMBtu/hr

- Updated section title by removing BLR4 and HTR2, renaming HTR3 as HTR4, and adding HTR5.
- Updated citations of conditions 4.1.1, 4.1.2, and 4.1.5 to rename HTR3 to HTR4.
- Updated citations of conditions 4.1.1 and 4.1.2 to add HTR5.
- Added condition 4.1.6 to incorporate the maximum design heat input requirement for HTR5.

5.0 40 C.F.R. 63, Subpart ZZZZ MACT Requirements

- Removed and reserved conditions 5.1.1, 5.1.4.a, 5.2.2, 5.2.3, 5.2.5, 5.4.2, and 5.4.3 which were cited as only being subject to emission unit 081G3 which has been removed.
- Updated the citations of conditions 5.1.5, 5.1.6, 5.2.4, 5.4.4, and 5.5.1 to account for the removal of emission unit 081G3.

Note: the application requested the removal of condition 5.5.4.a citing that all the emission units subject to the requirement had been removed. However, emission unit 08108 is subject to the requirement and is still at the facility.

6.0 40 C.F.R. 63, Subpart DDDDD MACT Requirements

- Updated condition 6.1.1.
- Updated citation of condition 6.1.2.a to account for the renaming of HTR3 to HTR4.
- Removed condition 6.1.2.b since the cited emission units subject to the requirement (BLR4 and HTR2) have been removed.
- Updated the note in condition 6.4.1.(1) to account for the removal of BLR4 and HTR2 and the renaming of HTR3 to HTR4.

8.0 45CSR13, Permit No. R13-2149 Requirements

- Removed and reserved conditions 8.1.1 and 8.1.2 due to the removal of 081G3.
- Updated the citations of conditions 8.1.3, 8.1.4, 8.1.5 and 8.1.6 due to the renumbering of underlying R13-2149F conditions.
- Removed condition 8.1.10 due to the requirement having been fulfilled.
- Updated the condition 8.4.1 to account for the removal of 081G3.

Non-Applicability Determinations

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

45CSR2 – Control of Particulate Matter Air Pollution From the Combustion of Fuel in Indirect Heat Exchangers. The heaters (SH1) included in this minor modification are indirect heat exchangers with a maximum design heat input less than 10 MMBtu/hr and are exempt from sections 4, 5, 6, 8 and 9 of 45CSR2 according to 45CSR§2-11.1.

45CSR10 - Control of Air Pollution From the Emission of Sulfur Oxides. The heaters (SH1) included in this minor modification are indirect heat exchangers that combust natural gas. They are not exempt from this rule but since their total heat input capacity is less than 10 MMBtu/hr, they have no requirements according to 45CSR§10-10.1.

40 C.F.R. 60 Subpart Dc — Standards of Performance for Steam Generating Units. The proposed heaters (SH1) are less than 10 MMBtu/hr, therefore, this regulation does not apply in accordance with §60.40c(a).

40 C.F.R. 60 Subpart Kc — Standards of Performance for Volatile Organic Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After October 4, 2023. The proposed storage vessel (A21) has a design capacity that is below 20,000 gallons (75.7 m³), therefore, this regulation does not apply in accordance with §60.110c(a).

40 C.F.R. 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). The equipment added during this modification (A21 and HTR5) were constructed after December 6, 2022. Therefore, they are not subject to Subpart OOOOa.

40 C.F.R. 60 Subpart OOOOb — Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022. Tank A21 has potential VOC emissions of 0.36 tpy which is less than the 6 tpy threshold of 40 C.F.R. §60.5365b(e)(1)(i) and thus is not an affected source under Subpart OOOOb. Heaters are not a specified source under 40 C.F.R. §60.5365b, thus the Heaters (SH1) are not subject to Subpart OOOOb.

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: Not Applicable for minor modifications.
Ending Date: N/A

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)

Not applicable.