

Fact Sheet



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

This Fact Sheet serves to address the changes specific to this Significant Modification and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on July 24, 2017.

Permit Number: **R30-07700017-2017**
Application Received: **December 7, 2018**
Plant Identification Number: **077-00017**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Terra Alta Compressor Station**
Mailing Address: **1700 MacCorkle Avenue, SE, Charleston, WV 25314**

Permit Action Number: *SM01* Revised: *June 4, 2019*

Physical Location: Terra Alta, Preston County, West Virginia
UTM Coordinates: 625.13 km Easting • 4364.38 km Northing • Zone 17
Directions: From I-79 take State Route 7 east to Terra Alta. Traveling east on State Route 7 to the town of Terra Alta, turn right onto Secondary Route 53. Proceed approximately 2 miles to the station which is located on the right.

Facility Description

Terra Alta Compressor 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 six (6) heaters, five (5) 1100-hp and one (1) 174-hp natural gas fired reciprocating engines, one (1) 0.5 MMBtu/hr odorant flare, and numerous storage tanks of various sizes. On-site support equipment includes one (1) 530-hp emergency generator and one (1) heating system boiler at 3.57 MMBtu/hr.

This modification is proposing to add R13-3431 requirements for emergency generator (049G3) rated at 530 horsepower (hp); and remove the existing emergency generator (049G1) rated at 300-hp. 049G3 was permitted under R13-3431.

Emissions Summary

The change in potential emissions associated with the significant modification (SM01) is as follows:

Pollutants	Change in Potential Emissions, TPY
CO	-2.45
NO _x	-1.17
PM ₁₀	+0.01
VOC	+0.20
Formaldehyde	+0.01

Title V Program Applicability Basis

This facility has the potential to emit 387.79 tons per year of Nitrogen Oxides and 11.25 tons per year of Formaldehyde. Due to this facility's potential to emit over 100 tons per year of a 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	Permits for Construction, Modification, Relocation and Operation of Stationary Sources
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for Hazardous Air Pollutants
	40 CFR 63, Subpart ZZZZ	MACT for Reciprocating Internal Combustion Engines
State Only:	None	

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 following Permits/Consent Orders are affected by this modification:

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R13-3431	March 13, 2019	

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

Changes from R13-3431 have been incorporated in the Title V permit. These changes include the following:

- The emergency generator (Emission Unit ID-049G1 rated at 300-hp) has been removed from the Emission Units Table.
- One (1) 530-hp emergency generator (Emission Unit ID-049G3) was incorporated into Title V Permit No. R30-07700017-2017 without receiving an R13 permit first, but it has not yet been installed. Through R13-3431, the company received the permit for the emergency generator (Emission Unit ID-049G3). Therefore, year of installation of Emission Units ID-049G3 was corrected from 2016 to 2019 in the Emission Units Table of this permit and R13-3431 applicable requirements were included in Section 7 of this permit.
- 40 CFR 64 – Compliance Assurance Monitoring (CAM): The proposed emergency generator (Emission Unit ID-049G3) does not have a control device so it doesn't trigger a CAM review.
- Engine/Generator G3:
The proposed emergency generator (Emission Unit ID-049G3) is a new, emergency, 4-stroke lean burn engine greater than 500 hp located at a major source of HAPs. Since it commenced construction after 6/12/2006 but was manufactured in 2008, before the date of January 1, 2009, it is exempt from 40 CFR 60 Subpart JJJJ. This engine is subject to continuous compliance and monitoring of operating hours from 40 CFR Part 63, Subpart ZZZZ. The requirements were already included in Section 5.0 of the permit.

Non-Applicability Determinations

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

40 CFR 60 Subpart Dc – *Standards of Performance for Steam Generating Units*: The heaters and heating system boiler at this facility are less than 10 mmBtu/hr; Hence Subpart Dc is not applicable in accordance with 40 CFR §60.40c(a).

40 CFR 60 Subpart GG – *Standards of Performance for Stationary Gas Turbines*: There are no turbine engines at this facility.

40 CFR 60 Subparts K,Ka – *Standards of Performance for Storage Vessels for Petroleum Liquids*: All tanks at the facility are below 40,000 gallons in capacity as specified in 40 CFR §§60.110(a) and 60.110a(a).

40 CFR 60 Subparts Kb – *Standards of Performance for Storage Vessels for Volatile Organic Liquids*: All tanks at the station are between 75 m³ (19,813 gallons) and 151 m³ (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 40 CFR §§60.110b(a) and (b).

40 CFR 60 Subpart KKK – *Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant*: This compressor 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 CFR 60 Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*: There are no compression ignition engines at this facility.

40 CFR 60 Subpart JJJJ – *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*: All non-emergency SI engines located at this site were installed before July 12, 2006. These engines are not subject to 40 CFR Part 60 Subpart JJJJ per 40 CFR §60.4230(a)(4). The emergency SI engine was manufactured before January 1, 2009 and is not subject per 40 CFR §60.4230(a)(4)(iv).

40 CFR 60 Subpart KKKK – *Standards of Performance for Stationary Combustion Turbines* – There are no turbine engines at this facility.

40 CFR 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*. The storage vessel requirements defined for transmission sources are not applicable to this site because all vessels were constructed, modified, or reconstructed prior to August 23, 2011, in accordance with 40CFR§60.5365(e).

40 CFR 60 Subpart OOOOa – *Standards of Performance for Crude Oil and Natural Gas Facilities for 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 prior to September 18, 2015 in accordance with 40 CFR §60.5365a.

40 CFR 63 Subpart HHH – *National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities*: The transmission station is not subject to Subpart HHH since there are no affected dehydration units utilized at this site.

40 CFR 63 Subpart YYYY – Turbine MACT: There are no turbine engines at this facility.

40 CFR 63 Subpart JJJJJ; *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*: This subpart does not apply to the facility since the line heaters and heating system boiler are fueled by natural gas as defined in 40 CFR §63.11195(e) and the facility is a major source of HAPs.

40 CFR 64 – Compliance Assurance Monitoring (CAM): Most of the facility is exempt per 40 CFR §64.2(a)(2). The only add-on control at this facility is the catalyst on Engine EN07, however it is exempt because it is subject to 40 CFR 63, Subpart ZZZZ in accordance with 40 CFR §64.2(b)(1)(i).

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: Friday, April 19, 2019
Ending Date: Monday, May 20, 2019

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. 1228 • 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.

Response to Comments (Statement of Basis)

Not applicable