

Fact Sheet



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

Permit Number: **R30-03900074-2016**
Application Received: **September 14, 2016**
Plant Identification Number: **039-00074**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Walgrove Compressor Station**
Mailing Address: **1700 MacCorkle Avenue, S.E.**
Charleston, WV 25314

Revised: N/A

Physical Location:	367 Walgrove Rd, Elkview, Kanawha County, West Virginia
UTM Coordinates:	461.76 km Easting • 4257.32 km Northing • Zone 17
Directions:	Traveling I-79N from Charleston, exit at Elkview and turn right, go a short distance to US Route 119, turn left and proceed on US Rt. 119 to the town of Blue Creek. Turn right onto Secondary Route 57, travel across the Elk River and turn left at the intersection, the station is approximately 1.5 miles from the intersection.

Facility Description

The Walgrove Station is a natural gas transmission facility covered by Standard Industrial Classification (SIC) 4922. The facility equipment at this location includes a 880 hp 2-cycle, lean burn Reciprocating Engine/Integral Compressor and a 440 hp 4-cycle, rich burn Reciprocating Engine/Integral Compressor.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2015 Actual Emissions
Carbon Monoxide (CO)	12.45	3.80
Nitrogen Oxides (NO _x)	240.52	56.17
Particulate Matter (PM _{2.5})	2.04	0.63
Particulate Matter (PM ₁₀)	2.04	0.63
Total Particulate Matter (TSP)	2.04	0.63
Sulfur Dioxide (SO ₂)	0.04	0.012
Volatile Organic Compounds (VOC)	5.69	1.98

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2015 Actual Emissions
Acetaldehyde	0.32	-
Benzene	0.10	-
Ethyl Benzene	0.01	-
Formaldehyde	2.29	0.91
n-Hexane	0.02	-
Toluene	0.04	-
Xylene	0.01	-
Other HAPs	0.57	-
Total HAPs	3.36	0.91

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

Title V Program Applicability Basis

This facility has the potential to emit 240.52 TPY of NO_x. 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:	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.

	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	Emissions standards for HAPs.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 63, Subpart ZZZZ	NESHAPs for RICE
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR17	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>)
None	N/A	

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

Reformatting of Permit

The previous permit was written in a different format. It was written in the general permit-style format. With this permit renewal, the permit was rewritten using the current Title V boilerplate.

Section 4.0: 40 C.F.R. 63, Subpart ZZZZ Requirements

This is the only source-specific section of this permit. This section includes all RICE MACT requirements for the two engines installed at this facility:

- The Cooper-Bessemer GMV-8TF engine (04201) is a two cycle, lean burn engine installed in 1958 rated at over 500 horsepower (880 horsepower) located at an area source of HAPs.
- The Ingersoll-Rand 8SVG-2 engine (04202) is a four cycle, rich burn engine installed in 1963 rated at less than 500 horsepower (440 horsepower) located at an area source of HAPs.

The following requirements from the RICE MACT were included in this permit section:

Condition	Summary of Requirement	Regulatory Citation
4.1.1.	Maintenance Requirements	45CSR34; 40 C.F.R. § 63.6603 and Table 2d, Items 6 and 10 of 40CFR63, Subpart ZZZZ
4.1.2.	General Requirements from RICE MACT	45CSR34; 40 C.F.R. § 63.6605
4.1.3	Continuous Compliance Requirements	45CSR34; 40 C.F.R. § 63.6640(a); and Table 6, Item 9 of 40CFR63, Subpart ZZZZ
4.1.4.	Compliance with General Provisions	45CSR34; 40 C.F.R. § 63.6665
4.2.1.a.	Operate According to Manufacturer's Instructions	45CSR34; 40 C.F.R. §§ 63.6625(e), (e)(5), and (e)(8)
4.2.1.b.	Minimize Idle Time	45CSR34; 40 C.F.R. § 63.6625(h)
4.2.1.c.	Oil Analysis Program	45CSR34; 40 C.F.R. § 63.6625(j)
4.4.1.	Records Showing Continuous Compliance	45CSR34; 40 C.F.R. § 63.6655(d)
4.4.2.	Maintenance Records	45CSR34; 40 C.F.R. §§ 63.6655(e) and (e)(3)
4.5.1.	Reporting of Instances Where Emission and Operation Limitations Were Not Met	45CSR34; 40 C.F.R. § 63.6640(b)
4.5.2.	Reporting When Requirements in Table 8 to 40CFR63, Subpart ZZZZ Were Not Met	45CSR34; 40 C.F.R. § 63.6640(e)

Non-Applicability Determinations

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

45CSR4	<i>To Prevent and Control the Discharge of Air Pollutants into the Open Air Which Cause or Contributes to an Objectionable Odor or Odors:</i> This State Rule shall not apply to the following source of objectionable odor until such time as feasible control methods are developed: Internal combustion engines.
45CSR10	<i>To Prevent and Control Air Pollution from the Emission of Sulfur Dioxide - Emissions from Indirect Heat Exchangers.</i> WVDAQ has determined that 45CSR10 does not apply to natural gas fired engines. Additionally, there are no other fuel burning units operating at this facility.
45CSR21	<i>To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds:</i> All storage tanks at the station, are listed as insignificant sources and are below 40,000 gallons in capacity, which exempts the facility from 45CSR§21-28. The compressor station is not engaged in the extraction or fractionation of natural gas which exempts the facility from 45CSR§21-29.
45CSR27	<i>To Prevent and Control the Emissions of Toxic Air Pollutants:</i> 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. Part 60 Subpart JJJJ	<i>Standards of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines.</i> All SI engines located at this site were installed before July 12, 2006. Thus, these engines are considered existing sources and are not subject to the New Source Performance Standards of 40 C.F.R. Part 60 Subpart JJJJ. [40CFR§60.4230(a)(4)]

40 C.F.R. Part 60 Subpart OOOO	<i>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.</i> The Storage Vessel requirement defined for transmission sources is not applicable to this site because all vessels commenced construction, or were modified or reconstructed, prior to August 23, 2011 in accordance with the applicability criteria defined within 40CFR§60.5365(e). No other affected sources were identified at this site.
40 C.F.R. Part 60 Subpart OOOOa	<i>Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced after September 18, 2015.</i> The 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 the applicability criteria defined within 40CFR§60.5365a.
40 C.F.R. Part 60 Subpart Dc	<i>Standards of Performance for Steam Generating Units:</i> There are no fuel burning steam generating units operated at this facility and therefore the site has no affected sources that would meet applicability criteria defined within 40CFR§60.40c (a).
40 C.F.R. Part 60 Subpart K and Ka	<i>Standards of Performance for Petroleum Liquid Storage Vessels.</i> All storage tanks at the station are below the applicability criteria of 40,000 gallons in capacity as stated in 40CFR§§60.110(a) and 60.110a(a).
40 C.F.R. Part 60 Subpart Kb	<i>Standards of Performance for Petroleum Liquid Storage Vessels.</i> All tanks at the station are below the applicability criteria of 19,813 gallons in capacity as stated in 40CFR§60.110b(a).
40 C.F.R. Part 60 Subpart KKK	<i>Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants.</i> The 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. As a result, the station has no affected sources operating within this source category.
40 C.F.R. Part 60 Subpart GG	<i>Standards of Performance for Stationary Gas Turbines.</i> The provisions of this subpart are not applicable because this facility does not operate gas turbines for compression.
40 C.F.R. Part 60 Subpart IIII	<i>Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.</i> The Compressor Station does not utilize compression ignition internal combustion engines.
40 C.F.R. Part 60 Subpart KKKK	<i>Standards of Performance for Stationary Combustion Turbines.</i> The provisions of this subpart are not applicable because the facility does not utilize turbines for compression.
40 C.F.R. Part 63 Subpart HHH	<i>National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities.</i> The Compressor Station is not subject to Subpart HHH since the station does not utilize dehydration and is not a major source of HAPs.
40 C.F.R. Part 63 Subpart YYYY	<i>National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines.</i> The provisions of this subpart are not applicable because the site is not classified as a major HAP source and it does not utilize turbines for compression.
40 C.F.R. Part 63 Subpart DDDDD	<i>National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters.</i> The provisions of this subpart do not apply to this Station since it does not exceed major source HAP thresholds. Additionally, there are no boilers or process heaters at this site.
40 C.F.R. Part 63 Subpart JJJJJ	<i>National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources.</i> The facility is not subject to 40 C.F.R. Part 63 Subpart JJJJJ since there are no steam generating units utilized at this site.

40 C.F.R. Part 64	<i>Compliance Assurance Monitoring.</i> This is the third permit renewal for the facility. The compressor station was found not to be subject to Compliance Assurance Monitoring (CAM) during the previous renewal cycles since the facility did not have any pollutant specific emissions units (PSEU) that satisfied all of the applicability criteria requirements of 40 C.F.R § 64.2 (a). There have been no changes to any equipment at the facility since the last renewal that have resulted in a source satisfying the applicability requirements of 40 C.F.R. § 64.2 (a) and becoming subject to CAM.
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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, October 14, 2016
Ending Date: Monday, November 14, 2016

Point of Contact

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

Rex Compston, P.E.
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Division of Air Quality
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Phone: 304/926-0499 ext. 1209 • Fax: 304/926-0478
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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.