

Fact Sheet



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

Permit Number: **R30-03900047-2012**
Application Received: **November 2, 2011**
Plant Identification Number: **039-00047**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Lanham Compressor Station**
Mailing Address: **1700 MacCorkle Avenue, SE**
Charleston, WV 25314

Revised: N/A

Physical Location: Rocky Fork, Kanawha County, West Virginia
UTM Coordinates: 438.0 km Easting • 4258.8 km Northing • Zone 17
Directions: Traveling I-64, exit at Cross Lanes and turn right onto State Route 622.
Continue on Route 622 to the station which is located at the intersection
of State Route 622 and Secondary Route 7.

Facility Description

The Lanham compressor station compresses natural gas for pipeline transmission. The facility operates under SIC code 4922. This facility uses one (1) heating system boiler, one (1) natural gas line heater, eight (8) reciprocating engines/ integral compressors, one (1) reciprocating engine/air compressor, and two (2) reciprocating engines/generators.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2011 Actual Emissions
Carbon Monoxide (CO)	264.17	11.02
Nitrogen Oxides (NO _x)	1,900.67	120.11
Particulate Matter (PM ₁₀)	16.96	1.29
Total Particulate Matter (TSP)	16.96	1.29
Sulfur Dioxide (SO ₂)	0.35	0.03
Volatile Organic Compounds (VOC)	68.09	4.17

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2011 Actual Emissions
Acetaldehyde	3.44	-
Benzene	0.88	-
Ethylbenzene	0.05	-
Ethylene Glycol	<0.01	0.000002
Hexane	0.19	-
Toluene	0.43	-
Xylene (Mixed Isomers)	0.12	-
Formaldehyde	24.51	1.85
Total HAPs	29.63	1.85

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

Title V Program Applicability Basis

This facility has the potential to emit 264.17 TPY of CO, 1,900.67 TPY of NO_x, 24.51 TPY of formaldehyde, and 29.63 TPY of aggregate HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 TPY of a single HAP, and over 25 tons per year of aggregate HAPs, 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 Air Pollution from Indirect Heat Exchangers
	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	Hazardous air pollutants.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 63, Subpart ZZZZ	RICE MACT
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR17	Fugitive Particulate emissions

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>
N/A	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 B," which may be downloaded from DAQ's website.

Determinations and Justifications

This facility was previously registered under General Permit R30-NGGP-2007 for Natural Gas Compressor Facilities. The Division of Air Quality did not renew the general permit for natural gas compressor facilities, therefore this facility's renewal will be issued as a source-specific permit. The source-specific permit includes various requirements which are potentially applicable to natural gas compressor stations. The applicable requirements column in the Section 1.0 Emission Units Table of the permit indicates which of the requirements in Sections 2.0 through 24.0 are applicable to each emissions unit.

Removal of Equipment

A Rolls Royce Avon 76G Turbine Engine/Centrifugal Compressor (E09) rated at 11,100 hp was listed in the previous permit renewal. However, it has been removed and is not included in this permit renewal.

40 CFR 63, Subpart ZZZZ: RICE Requirements

Eight (8) compressor engines (E01, E02, E03, E04, E05, E06, E07, E08) are existing non-emergency SI 2SLB engines rated over 500 hp at a major source of HAPs and do not have any applicable requirements from this subpart as specified in 40 CFR §§ 63.6590(b)(3)(i) and 63.6600(c).

The Wisconsin W4-1770 reciprocating engine/air compressor (AC1) is an existing non-emergency SI 4SRB engine rated below 100 hp at a major source of HAPs and is subject to the following requirements:

- The emission limitations listed in 40 CFR § 63.6602 and Table 2c (Line 7) to 40 CFR Part 63, Subpart ZZZZ.
- The monitoring requirements listed in 40 CFR § 63.6625(e), (h), and (j).
- The continuous compliance requirements listed in 40 CFR §§ 63.6605 and 63.6640 and Table 6 (Line 9) to 40 CFR Part 63, Subpart ZZZZ.
- The recordkeeping requirements listed in 40 CFR § 63.6655 (except c and f).
- The general provisions of 40 CFR Part 63. Except per 40 CFR § 63.6645(a)(5), the following do not apply: 40 CFR §§ 63.7(b) and (c); 63.8(e), (f)(4) and (f)(6); and 63.9(b)-(e), (g) and (h).

The Ingersoll-Rand PVG-6 Reciprocating Engines/generators (G1 and G2) are existing emergency SI engines rated at 275 and 306 hp at a major source of HAPs and are subject to the following requirements:

- The emission limitations listed in 40 CFR § 63.6602 and Table 2c (Line 6) to 40 CFR Part 63, Subpart ZZZZ.
- The monitoring requirements listed in 40 CFR §§ 63.6625(e), (f), (h), and (j).
- The continuous compliance requirements listed in 40 CFR §§ 63.6605 & 63.6640 and Table 6 (Line 9) to 40 CFR 63, Subpart ZZZZ.
- The recordkeeping requirements listed in 40 CFR § 63.6655 (except c).
- The reporting requirements listed in Footnote 1 of Table 2c to 40 CFR Part 63, Subpart ZZZZ.
- The general provisions of 40 CFR Part 63. Except per 40 CFR § 63.6645(a)(5), the following do not apply: 40 CFR §§ 63.7(b) and (c); 63.8(e), (f)(4) and (f)(6); and 63.9(b)-(e), (g) and (h).

These requirements were specified in the emission units table.

Greenhouse Gas Tailoring Rule: This is a renewal Title V Permit and there have been no changes that would have triggered a PSD permit. As such, there are no applicable GHG permitting requirements.

Non-Applicability Determinations

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

45CSR4—*To Prevent and Control the Discharge of Air Pollutants into the Open Air Which Causes or Contributes to an Objectionable Odor or Odors:* According to 45CSR§4-7.1, this rule shall not apply to the following sources of objectionable odor until such time as feasible control methods are developed: Internal combustion engines.

45CSR10—*To Prevent and Control Air Pollution from the Emission of Sulfur Oxides:* 45CSR10 is not applicable to the facility's boiler and heater because it is rated at less than 10 mmBtu/hr.

45CSR21—*To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds:* All storage tanks at the Lanham station, which are listed as insignificant sources, are below 40,000 gallons in capacity which exempts the facility from 45CSR§21-28. Lanham station is not engaged in the extraction or fractionation of natural gas which exempts the facility from 45CSR§21-29.

45CSR27—*To Prevent and Control the Emissions of Toxic Air Pollutants*: 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 CFR 60 Subparts Dc—*Standards of Performance for Steam Generating Units*: The heating system boiler and line heater at this facility are both less than 10 mmBtu/hr; Hence Subpart Dc is not applicable.

40 CFR 60 Subpart GG—*Standards of Performance for Stationary Gas Turbines*: There are no turbines at the Lanham station.

40 CFR 60, Subparts K and Ka—*Standards of Performance for Storage Vessels for Petroleum Liquids*: All tanks at the Lanham station are below 40,000 gallons in capacity.

40 CFR 60, Subpart Kb—*Standards of Performance for Volatile Organic Liquid Storage Vessels*: All tanks at the Lanham station are below 75 m³ in capacity.

40 CFR 60, Subpart KKK—*Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant*: The Lanham 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 the facility.

40 CFR 60, Subpart JJJJ—*Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*: Engines at the facility were constructed, reconstructed, or modified prior to June 12, 2006.

40 CFR 60, Subpart KKKK—*Standards of Performance for Stationary Combustion Turbines*: There are no turbines at this facility.

40 CFR 63, Subpart HHH—*National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities*: The facility does not have a glycol dehydration unit and is therefore not subject to the requirements of this subpart.

40 CFR 63, Subpart YYYYY—*Turbine MACT*: There are no turbines at this facility.

40 CFR 63, Subpart DDDDD—*Boiler MACT*: There is one heating system boiler (BL2) and one natural gas line heater (H1), defined pursuant to 40 CFR §63.7575, at this facility using gaseous fuel and both are less than 10 mmBtu/hr; hence, Subpart DDDDD is not applicable.

40 CFR 64—*Compliance Assurance Monitoring (CAM)*: There are no add-on controls at this facility; therefore, in accordance with 40 CFR §64.2(a), CAM is not applicable to this facility.

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: September 13, 2012
Ending Date: October 15, 2012

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

Rex Compston, P.E.
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

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.

Point of Contact

Rex Compston, P.E.
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1209 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Not applicable.