

Fact Sheet



For General Permit Registration Under 45CSR30 and Title V of the Clean Air Act

Permit Number: R30-NGGP-2007-03900048
Application Received: December 14, 2001
Plant Identification Number: 03900048
Permittee: **Columbia Gas Transmission**
Facility Name: Clendenin Compressor Station
Mailing Address: 1700 MacCorkle Avenue, SE
Charleston, WV 25314
Date: July 30, 2007

Physical Location: 120 West Union Road, Clendenin, Kanawha County, West Virginia 25045
UTM Coordinates: 472.746 km Easting • 4260.60 km Northing • Zone 17
Directions: Traveling north on US Route 119 from Clendenin, go approximately 0.8 mile and turn right onto Thorofare Road (WV secondary Route 59). Proceed approximately 2.5 miles and turn right onto Route 59-2 and travel approximately 1.2 miles to the station.

Facility Description

The Clendenin Station is a natural gas transmission facility covered by (SIC) 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of five (5) 3,000-hp and one (1) 4,000-hp natural gas fired reciprocating engines, one (1) 3,550-hp turbine engine, one (1) emergency generator, one (1) heating system boiler, one (1) line heater, one (1) air compressor, a wastewater evaporation injection system and multiple storage tanks of various sizes.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Criteria Pollutants	Potential Emissions	2005 Actual Emissions
Carbon Monoxide (CO)	288.70	112.90

Nitrogen Oxides (NO _x)	3,004.29	1200.36
Particulate Matter (PM ₁₀)	1.00	0.13
Total Particulate Matter (TSP)	1.00	0.13
Sulfur Dioxide (SO ₂)	0.57	0.21
Volatile Organic Compounds (VOC)	82.47	37.36

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2005 Actual Emissions
Formaldehyde	32.67	12.74
Other HAPs	6.55	0
Total HAPs	39.22	12.74

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

Title V Program Applicability Basis

This facility has the potential to emit 288.70 tons/yr of CO, 3,004.29 tons/yr of NO_x, 32.67 tons/yr of Formaldehyde and 39.22 tons/yr of Total HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Columbia Gas Transmission Corporation 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:	45CSR1	Control/Reduction of NO _x
	45CSR2	Indirect Heat Exchangers
	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permit for construction, modification
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
State Only:	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
	45CSR4	No objectionable odors.
	45CSR17	Particulate Fugitive

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft 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, 45CSR15, 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>)
R13-2247A	February 13, 2007	N/A
CO-R1-C-2007-4A (2005)	March 1, 2007	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

N/A

Non-Applicability Determinations

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

- a. 40 C.F.R. 60 Subpart GG; *Standards of Performance for Stationary Gas Turbines - There is one turbine at Clendenin station which was installed in 1971. No modifications to the turbine have occurred since the original installation.*
- b. 40 C.F.R. 60 Subparts K,Ka; *Standards of Performance for Storage Vessels for Petroleum Liquids - All tanks at Clendenin station are below 40,000 gallons in capacity.*
- c. 40 C.F.R. 60 Subpart Kb; *Standards of Performance for Volatile Organic Liquid Storage Vessels - All tanks at Clendenin station are below 75 m³ in capacity.*
- d. 40 C.F.R. 60 Subpart KKK; *Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant - Clendenin 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.*
- e. 45CSR21; *To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds: All storage tanks at Clendenin station are below 40,000 gallons in capacity which exempts the facility from 45 CSR§21-28. Clendenin station is not engaged in the extraction or fractionation of natural gas which exempts the facility from 45 CSR§21-29.*
- f. 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."*
- g. 40 C.F.R. 63 Subpart ZZZZ; *RICE MACT - All reciprocating engines are existing (installed before December 19, 2002) 4-cycle, lean burn or less than 500 HP; Hence Rice MACT is not applicable to this facility pursuant to 40 C.F.R § 63.6590(b)3.*

- h. 40 C.F.R. 63 Subpart YYYYY; Turbine *MACT* - There is one turbine at Clendenin station which was installed in 1971. No modifications to the turbine have occurred since the original installation; In April 2004 (68 FR 18338), EPA proposed to delete stationary combustion turbines from the NESHAP category list and in August 2004 Subpart YYYYY was amended to stay all technical requirements until delisting of these sources was finalized; Source not subject to this *MACT* pursuant to 40 CFR 63.6090(b)4.
- i. 40 C.F.R. 60 Subparts Dc; *Standards of Performance for Steam Generating Units* – There are two steam generating units, defined pursuant to 40 C.F.R § 60.41c, at this facility and both are less than 10 MMBtu/hr; Hence Subpart Dc is not applicable.
- j. 40 C.F.R. 63 Subpart DDDDD; Boiler *MACT* - There is one heating system boiler (BL3) and one process heater (H1), defined pursuant to 40 C.F.R § 63.7575, at this facility using gaseous fuel and both are less than 10 MMBtu/hr; Hence Subpart DDDDD is not applicable.

This facility is a major source of HAPs; this facility is not subject to any *MACT* because of g, h and j above.

Since the last Title V modification WVDEP has determined that 45CSR10 does not apply to gas fired engines. Also 45CSR10 is not applicable to the facility boilers and heater because they are less than 10 MMBtu/hr.

40 CFR 64 - Engines and turbine do not have any add-on control; therefore, in accordance with 40 C.F.R § 64.2(a), CAM is not applicable to this facility. Boiler and heater are not a major source; therefore, CAM is not applicable.

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Title V general Permit has already been advertised and finalized. This fact sheet for facility registration is written for the file. This fact sheet states which rules are applicable to the particular facility and which rules are not applicable.

Procedure for Requesting Public Hearing

N/A

Point of Contact

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Response to Comments (Statement of Basis)

N/A