

Fact Sheet



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

Permit Number: R30-NGGP-2007-10300010

Application Received: August 4, 2004

Plant Identification Number: 10300010

Permittee: **Columbia Gas Transmission**

Facility Name: Smithfield Compressor Station

Mailing Address: 1700 MacCorkle Avenue, SE

Charleston, WV 25314

Physical Location:	Smithfield, Wetzel County, West Virginia
UTM Coordinates:	539.68 km Easting • 4,370.03 km Northing • Zone 17
Directions:	Traveling north of U.S. Route 19 from Clarksburg to the intersection with State Route 20, turn left onto Route 20. Proceed west on Route 20 for approximately 1.8 miles past the town of Folsom to the station, which is on the left side of the road and visible.

Facility Description

Smithfield 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 one (1) 3.4 MMBtu/hr heating system boiler, two (2) 1500- HP natural gas fired reciprocating engines, one (1) 6,917-hp compressor turbines, two (2) indirect-fired line heaters, and numerous storage tanks of various sizes. On-site emergency equipment includes one (1) electrical generator rated at 250-hp.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Criteria Pollutants	Potential Emissions	2005 Actual Emissions
Carbon Monoxide (CO)	142.0	17.9
Nitrogen Oxides (NO _x)	552.6	15.7
Particulate Matter (PM ₁₀)	2.0	0.3
Total Particulate Matter (TSP)	2.0	0.3
Sulfur Dioxide (SO ₂)	1.9	0.8
Volatile Organic Compounds (VOC)	22.9	0.6
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2005 Actual Emissions
Total HAPs*	8.2	0.1
<i>Some of the above HAPs may be counted as PM or VOCs.</i>		
* HAPs are not speciated because no applicability was triggered.		

Title V Program Applicability Basis

This facility has the potential to emit 552.6 tons/yr of NO_x and 142.0 tons of CO. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, 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:	45CSR2	Indirect Heat Exchangers
	45CSR6	Open burning prohibited.
	45CSR10	SO ₂ Emissions
	45CSR11	Standby plans for emergency episodes.
	45CSR13	
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Subpart GG	Turbine NSPS
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances

State Only: 45CSR4 No objectionable odors.
 45CSR17 Particulate Fugitive

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 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>)
R13-2064E	June 27, 2006	
CO-R1-C-2007-4A (2005)	March 1, 2007	

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 is not a major source of HAPs, hence no MACT is applicable to this facility.

The heating system boiler and indirect-fired line heaters at Smithfield are < 10 mmBtu/hr and solely fired with pipeline quality natural gas; hence Section 4.0 of the Title V General Permit is applicable. According to 45CSR§10-10 these boiler and heaters are exempt from MRR and 45CSR§10-3.

Requirement # 3 under “Other Requirements” summarizes permit limits for NOx and CO under different operating scenarios of turbine (E05). Emission limits for VOC, SO₂, PM₁₀ & formaldehyde in previous Title V permit has been taken out because R13-2064E has limits only for NOx and CO to ensure PSD non-applicability.

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 Subparts K,Ka; *Standards of Performance for Storage Vessels for Petroleum Liquids* - All tanks at Smithfield station are below 40,000 gallons in capacity.
- b. 40 C.F.R. 60 Subpart Kb; *Standards of Performance for Volatile Organic Liquid Storage Vessels* - All tanks at Smithfield station are below 75 m³ in capacity.
- c. 40 C.F.R. 60 Subpart KKK; *Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant* - Smithfield 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.
- d. 45CSR21; *To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds*: This facility is not located in one of the affected counties.

- e. 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.”
- f. 40 C.F.R. 60 Subparts Dc; *Standards of Performance for Steam Generating Units* – The boiler and gas heaters at this facility are less than 10 MMBtu/hr; Hence Subpart Dc is not applicable.
- g. 40 C.F.R. 60 Subpart KKKK; Turbine NSPS – Not applicable to this facility because the turbine was installed in 1999 and has not been modified. 40 C.F.R. 60 Subpart KKKK is applicable to turbines installed or modified after February 18, 2005.

Since the last Title V modification WVDEP has determined that 45CSR10 does not apply to gas fired engines.

40 CFR 64 - Engines or Turbines 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. The boilers 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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West Virginia Department of Environmental Protection
Division of Air Quality
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Response to Comments (Statement of Basis)

Not applicable.