West Virginia Department of Environmental Protection Division of Air Quality

Fact Sheet



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

Permit Number: R30-07100008-2018
Application Received: April 13, 2017
Plant Identification Number: 07100008
Permittee: Columbia Gas Transmission, LLC

Facility Name: Seneca Compressor Station
Mailing Address: 5151 San Felipe St., Suite 2400

Houston, TX 77056

Physical Location:

Seneca Rocks, Pendleton County, West Virginia

UTM Coordinates:

639.5 km Easting • 4,301.10 km Northing • Zone 17

Directions:

Traveling US Route 33 East from Elkins, turn left at the intersection with State Route 28 (Seneca Rocks). Proceed approximately 2 miles to the station which is

located on the left.

Facility Description

The Seneca 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) 13,750 hp, two (2) 7,491 hp, one (1) 1,557 hp, one (1) 15,432 hp, and one (1) 10,613 hp natural gas fired turbine engines, one (1) emergency generator, two (2) fuel gas heaters, one (1) process heater, fifty nine (59) Catalytic Space Heaters and fourteen (14) storage tanks of various sizes.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]			
Regulated Pollutants	Potential Emissions	2016 Actual Emissions	
Carbon Monoxide (CO)	371.47	56.1	
Nitrogen Oxides (NO _X)	314.12	23.32	
Particulate Matter (PM _{2.5})	21.02	1.93	
Particulate Matter (PM ₁₀)	21.02	1.93	
Total Particulate Matter (TSP)	21.02	1.93	
Sulfur Dioxide (SO ₂)	1.32	0.12	
Volatile Organic Compounds (VOC)	66.72	2.81	

PM_{10} is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2016 Actual Emissions
Benzene	0.02	0
Toluene	0.20	0.01
Ethylbenzene	0.05	0
Xylene	0.10	0.01
n-Hexane	0.04	0.03
Formaldehyde	1.40	0.15
Acetaldehyde	0.08	0

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

Title V Program Applicability Basis

This facility has the potential to emit 314.12 tons/yr of NOx and 371.47 tons/yr of CO. 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: 45CSR2 Control of particulate matter emissions from

indirect heat exchangers.

45CSR6 Open burning prohibited.

45CSR11 Standby plans for emergency episodes.

45CSR13	Permits for Construction, Modification,
	Relocation and Operation of Stationary
	sources
45CSR16	Emission standards for New Stationary
	Sources pursuant to 40 C.F.R. Part 60
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. Part 61	Asbestos inspection and removal
40 C.F.R. Part 82, Subpart F	Ozone depleting substances
40 C.F.R. 60 Subpart JJJJ	NSPS for Stationary Spark Ignition IC
	Engines
40 C.F.R. Part 60 Subpart KKKK	Standards of Performance for Stationary
	Combustion Turbines
40 C.F.R. Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and
	Natural Gas Facilities for which
	Construction, Modification or
	Reconstruction Commenced After
	September 18, 2015
45CSR4	No objectionable odors.

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

State Only:

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R13-2715F	April 26, 2016	

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

There have been no changes to equipment or emission units since the last permit modification R30-07100008-2012(SM04). The format of the permit has been updated to the standard Title V format instead of the general permit type format.

Section 7.0 – includes the requirements of 40 C.F.R. Part 60 Subpart OOOOa, Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced after September 18, 2015, applicable to the facility after the Combustion Turbine/Compressor (Emission Point ID- E09) was installed in 2017 (after the subpart applicability date of September 18, 2015). The only section applicable to the facility is 40 C.F.R.§60.5397a (LDAR requirements). Turbine E09 is exempt from the "wet seal" centrifugal compressor requirements as a result of being "dry seal". The fugitive emission components became subject to LDAR in accordance with 40 C.F.R.§60.5365a(j)(1).

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 Cause or Contributes to an Objectionable Odor or Odors: 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	To Prevent and Control Air Pollution from the Emission of Sulfur Dioxide - Emissions from Indirect Heat Exchangers. WVDAQ has determined that 45CSR10 does not apply to natural gas fired engines. Also, the requirements for fuel burning units does not apply to HTR1, HTR2, and HTR3 because they have design heat inputs less than 10 mmBtu/hr and are exempt in accordance with 45CSR§10-10.1. The catalytic space heaters are not defined as fuel burning units.	
45CSR21	To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds: The facility is not located in a designated VOC County. Therefore, this State Rule does not apply.	
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 C.F.R. Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution. The Storage Vessel requirements defined for transmission sources are not applicable to this site because there are no affected source storage vessels constructed or reconstructed after August 23, 2011 as stated in accordance with 40CFR§60.5365(e). The compressor requirements defined for transmission sources are not applicable to this site because the facility is not located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment as stated in accordance with 40CFR§60.5365(b). No other affected sources were identified at this site.	

40 C.F.R. Part 60 Subpart K and Ka	Standards of Performance for Petroleum Liquid Storage Vessels. All 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	Standards of Performance for Volatile Organic Liquid Storage Vessels. All tanks at the station are below the applicability criteria of 75m ³ (19,813 gallons) in capacity as stated in 40CFR§60.110b(a).
40 C.F.R. Part 60 Subpart Dc	Standards of Performance for Steam Generating Units: The fuel gas heaters have a maximum design heat input capacity of less than 10 MMBtu/hr, which is below the applicability threshold defined within 40CFR§60.40c(a).
40 C.F.R. Part 60 Subpart GG	Standards of Performance for Stationary Turbines: The provisions of this subpart are not applicable because the turbines were installed after the applicability dates and are therefore, subject to 40 C.F.R. 60 Subpart KKKK. The only exception is the GE Frame 3 Turbine (ID 03704) which was installed in 1981, but as a relocated unit originally purchased in 1971. Therefore, the unit is not considered a new construction or modification in accordance with the General Provisions, 40CFR §60.14(e)(6).
40 C.F.R. Part 60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The compressor station does not have any compression ignition internal combustion engines.
40 C.F.R. Part 63 Subpart HHH	National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities. The compressor station is not subject to Subpart HHH since it is not a major source of HAPs and it does not incorporate dehydration operations.
40 C.F.R. Part 63 Subpart YYYY	National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines does not apply to this station since it does not exceed major source HAP thresholds.
40 C.F.R. Part 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters does not apply to this station since it does not exceed major source HAP thresholds.
40 C.F.R. Part 63 Subpart JJJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources. The facility is not subject to 40 C.F.R. Part 63 Subpart JJJJJJ since the fuel gas heaters and process heater are not boilers, but process heaters, which are not regulated under this source category.
40 C.F.R. Part 64	There are no add-on controls, so the CAM requirements are not applicable per 40 CFR§64.2(a)(2).

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: Tuesday, February 20, 2018
Ending Date: Thursday, March 22, 2018

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

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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.