

Fact Sheet



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

Permit Number: **R30-09900013-2012**
Application Received: **November 2, 2011**
Plant Identification Number: **099-00013**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Ceredo Compressor Station**
Mailing Address: **1700 MacCorkle Avenue, SE, Charleston, WV 25314**

Revised: *N/A*

Physical Location: Walker's Branch Road, Wayne County, West Virginia
UTM Coordinates: 366.1 km Easting • 4247.5 km Northing • Zone 17
Directions: Traveling I-64 West from Charleston, take the Kenova-Ceredo exit. Turn left onto Route 52. Make a left onto Airport Road. Turn right onto Walker's Branch Road at the Pilgrim Glass Plant, travel 2 miles, the station is on the left.

Facility Description

The Ceredo Station is a natural gas transmission facility covered by Standard Industrial Code (SIC) 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of six (6) 2800-hp and one (1) 2700-hp natural gas fired reciprocating compressor engines, one (1) 10,200-hp and one (1) 12,500-hp compressor turbines, and numerous storage tanks of various sizes. On-site support equipment includes one (1) 738 hp emergency generator, one (1) 6.84 MMBtu/hr boiler and one (1) 0.35 MMBtu/hr line heater.

Plantwide Emissions Summary

Regulated Pollutants (Tons per Year)	Potential Emissions	2011 Actual Emissions
Carbon Monoxide (CO)	345.74	131.97
Nitrogen Oxides (NO _x)	4095.35	1679.81
Particulate Matter (PM ₁₀)	29.15	12.08

Regulated Pollutants (Tons per Year)	Potential Emissions	2011 Actual Emissions
Total Particulate Matter (TSP)	29.15	12.08
Sulfur Dioxide (SO ₂)	2.68	0.46
Volatile Organic Compounds (VOC)	98.70	40.30

PM₁₀ is a component of TSP.

Hazardous Air Pollutants (Tons per Year)	Potential Emissions	2011 Actual Emissions
Formaldehyde	41.33	16.67
Other HAPs	8.71	0.02
Total HAPs	50.04	16.69

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

Title V Program Applicability Basis

This facility has the potential to emit 345.74 tons per year of Carbon Monoxide, 4095.35 tons per year of Nitrogen Oxides, 41.33 tons per year of Formaldehyde and 50.04 tons per year of total HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutants, over 10 tons per year 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 | PM limits for Indirect Heat Exchangers |
| 45CSR6 | Open burning prohibited |
| 45CSR11 | Standby plans for emergency episodes |
| 45CSR13 | Construction permits |
| 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 | Emission Standards for HAPs |
| 40 CFR Part 61 | Asbestos inspection and removal |
| 40 CFR Part 82, Subpart F | Ozone depleting substances |
| 40 C.F.R. Part 63, Subpart ZZZZ | National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines |

State Only:

- | | |
|---------|---|
| 45CSR4 | No objectionable odors. |
| 45CSR17 | Prevent And Control Particulate Matter Air Pollution From Materials Handling, Preparation, Storage And Other Sources Of 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>)
R13-1856	July 17, 1995	

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.

Determinations and Justifications

This is a renewal permit. 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. The following are the changes made from the existing registration:

40 CFR Part 63, Subpart ZZZZ - Engines E01-E07 are existing, non-emergency, spark-ignition, 2-cycle, lean burn greater than 500-hp constructed before December 19, 2002 and located at a major source of HAPs. These engines have no requirements in accordance with 40 CFR §§63.6590(b)(3)(i) and 63.6600(c). Engine G3 is an existing, emergency, spark-ignition, 4-cycle, lean burn greater than 500-hp constructed before December 19, 2002 and located at a major source of HAPs. Therefore, it is subject to 40 CFR §63.6640(f).

On September 11, 2012, a request was received for an off-permit change to replace existing boiler BLR1, with a heat input rating of 6.84 mmBtu/hr, with a new boiler (BLR2), with a heat input rating of 6.276 mmBtu/hr. There are no changes in applicable requirements due to the replacement, and the change in emissions is considered insignificant (less than 0.2 tons per year for each pollutant), therefore the replacement boiler was incorporated in the renewal Title V Permit.

Non-Applicability Determinations

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

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 boiler and heater because they are less than 10 mmBtu/hr.

According to 45CSR§2-11.1 the boiler and heater are exempt from MRR (monitoring, recordkeeping and reporting) because they are less than 10 mmBtu/hr.

45CSR21; *To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds*: All storage tanks at Ceredo station are below 40,000 gallons in capacity, hence 45CSR§21-28 is not applicable. Ceredo station is not engaged in the extraction or fractionation of natural gas, hence, 45CSR§21-29 is not applicable.

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. 60 Subparts Dc; *Standards of Performance for Steam Generating Units* – The boiler and heater at this facility are less than 10 mmBtu/hr; hence, Subpart Dc is not applicable.

40 C.F.R. 60 Subparts K,Ka; *Standards of Performance for Storage Vessels for Petroleum Liquids* - All tanks at Ceredo station are below 40,000 gallons in capacity.

40 C.F.R. 60 Subpart Kb; *Standards of Performance for Volatile Organic Liquid Storage Vessels* - All tanks at Ceredo station are below 75m³ in capacity.

40 C.F.R. 60 Subpart KKK; *Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant* - Ceredo 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 C.F.R. 60 Subpart GG; *Standards of Performance for Stationary Gas Turbines* - There are two turbines at Ceredo station which were installed in 1967 and 1971. No modifications to the turbines have occurred since the original installation. 40 C.F.R. 60 Subpart GG is not applicable because the engines were installed before October 3, 1977.

40 C.F.R. 60 Subpart IIII *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* – There are no compression engines at this facility.

40 C.F.R. 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 C.F.R. 60 Subpart KKKK *Standards of Performance for Stationary Combustion Turbines* – Turbines at the facility were constructed, reconstructed, or modified prior to February 18, 2005.

40 C.F.R. 63 Subpart DDDDD; *Boiler MACT* - The boiler and heater at this facility use gaseous fuel and are less than 10 mmBtu/hr; hence, Subpart DDDDD is not applicable per 40 CFR §63.7506(c)(3).

40 C.F.R. 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 C.F.R. 63 Subpart YYYY; *Turbine MACT* - There are two turbines at Ceredo station which were installed in 1967 and 1971. No modifications to the turbines have occurred since the original installation; hence, they are existing turbines and not subject to this MACT per 40 CFR §63.6090(b)(4).

[40 C.F.R. 64](#) – None of the emission units have any add-on controls; therefore, in accordance with 40 C.F.R § 64.2(a), CAM is not applicable to this facility.

Greenhouse Gas Permitting - This is a renewal Title V permit and there have been no modifications that would have triggered a PSD permit. Therefore, there are no applicable GHG requirements.

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 15, 2012
Ending Date: October 15, 2012

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

Bobbie Scroggie
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

Bobbie Scroggie
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1225 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Not applicable.