

Fact Sheet



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

Permit Number: **R30-03900049-2017**
Application Received: **January 23, 2017**
Plant Identification Number: **039-00049**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Coco Compressor Station**
Mailing Address: **1700 MacCorkle Avenue, S.E.**
Charleston, WV 25314

Revised: *N/A*

Physical Location:	Elkview, Kanawha County, West Virginia
UTM Coordinates:	463.6 km Easting • 4250.3 km Northing • Zone 17
Directions:	Traveling from the intersection of State Route 114 and secondary route 49, proceed 3.4 miles and bear right on Route 49. Go 3.6 miles from the intersection of Routes 47 and 49 and turn left onto secondary County Route 71 (Coco Road). Travel approximately 1.5 miles, the station is located on the right side of the road.

Facility Description

The Coco Station is a natural gas storage 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 five (5) 880-hp, one (1) 1,100-hp and one (1) 4,000-hp natural gas fired reciprocating engines, one (1) 1175-hp emergency generator, one (1) heating system boiler, two (2) heaters, and numerous storage tanks of various sizes.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2015 Actual Emissions
Carbon Monoxide (CO)	71.04	27.72
Nitrogen Oxides (NO _x)	925.38	378.28
Particulate Matter (PM _{2.5})	17.22	5.34
Particulate Matter (PM ₁₀)	17.22	5.34
Total Particulate Matter (TSP)	17.22	5.34
Sulfur Dioxide (SO ₂)	0.29	0.10
Volatile Organic Compounds (VOC)	44.87	16.71
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2015 Actual Emissions
Benzene	0.68	-
Toluene	0.34	-
Ethylbenzene	0.04	-
Xylene	0.10	-
n-Hexane	0.27	-
Formaldehyde	19.27	7.66
Acetaldehyde	2.71	-
Total HAPs	27.85	7.66
<i>Some of the above HAPs may be counted as PM or VOCs.</i>		

Title V Program Applicability Basis

This facility has the potential to emit 925.38 TPY of NO_x, 19.27 TPY of formaldehyde, and 27.85 TPY of aggregate 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, 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 Matter emissions
	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permits for construction, modification, relocation, etc.
	45CSR16	New Stationary Sources
	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 60, Subpart JJJJ	SI RICE NSPS
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 63, Subpart DDDDD	Boiler MACT
	40 C.F.R. Part 63, Subpart ZZZZ	NESHAPs for RICE
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR17	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 (if any)
R13-2087F	11/29/2016	

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

Reformatting of Permit

The previous permit renewal for this facility was written in a general permit-style format. With this renewal, it was reformatted in the standard Title V permit format. The contents and layout of the source-specific requirements will be discussed later in this fact sheet.

Equipment Changes

The following equipment has been removed since the last Title V permitting action, and the Emission Units Table was updated accordingly:

- Two emergency generators (Emission Unit IDs: 008G1 and 008G2) were replaced under R30-03900049-2012 (SM01). Therefore, they have been removed from the equipment table.
- A line heater (Emission Unit ID: HTR3) is being replaced with a new heater (Emission Unit ID: HTR5), therefore, HTR3 has been removed from the table and HTR5 has been added to the table.

Section 4.0: Miscellaneous Indirect Natural Gas Heaters and Boilers less than 10 MMBtu/hr [emission point ID(s): BL3, H2, H5]

This section addresses boilers and heaters that are rated below 10 MMBtu/hr. The permit conditions included in this section are summarized below:

Condition Number	Summary of Condition	Regulatory Citation	R13-2087 Condition
4.1.1	Opacity limits	45CSR§2-3.1	4.1.7 and 8.1.5
4.1.2	Compliance with the visible emission (opacity) requirements of 4.1.1 in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using COMS.	45CSR§2-3.2.	N/A
4.2.1	Visible emissions observations using Method 22 to demonstrating compliance with 4.1.1.	45CSR§30-5.1.c.	N/A

Section 5.0: 40 C.F.R. 63, Subpart ZZZZ MACT Requirements for New Emergency Reciprocating Internal Combustion SI RICE Engine(s) > 500 HP at Major HAP Sources [emission point ID(s): G3]

A Waukesha VGF-P48GL generator was installed in 2016. It is a 4 Cycle, Lean Burn engine fueled by natural gas rated at 1,175 HP. Since this engine is located at a major source of HAPs and was constructed after December 19, 2002, there are no emission limitations, fuel requirements, testing requirements, or initial compliance requirements under 40 C.F.R. 63, Subpart ZZZZ. All applicable requirements under this subpart are summarized in the table below:

Condition Number	Summary of Condition	Regulatory Citation	R13-2087 Condition
5.1.1	General requirements	45CSR34; 40 CFR §63.6605	N/A
5.1.2	Emergency engine operating requirements	45CSR34; 40 C.F.R. § 63.6640(f)	7.3.1
5.5.1	Reporting requirements	45CSR34; 40 CFR §63.6650(h)	N/A
5.5.2	Initial notification requirements	45CSR34; 40 CFR §63.6645(f)	7.5.1 and 7.6.1

**Section 6.0: 40 C.F.R. 63, Subpart DDDDD MACT Requirements for Boiler(s) and Process Heater(s)
 [emission point ID(s): BL3, H2, H5]**

The applicable boiler MACT requirements are summarized in the table below:

Condition Number	Summary of Condition	Regulatory Citation	R13-2087 Condition
6.1.1	Applicability of boiler MACT	45CSR34; 40 CFR §63.7490(a)(1)	N/A
6.1.2	Compliance date	45CSR34; 40 CFR §63.7495(b)	N/A
6.1.3	Tune-up and energy assessment requirements	45CSR34; 40 CFR §§63.7500(a)(1) and (3) and Table 3	N/A
6.1.4	Tune-up schedule	45CSR34; 40 CFR §63.7500(e)	8.1.6
6.1.5	Initial tune-up	45CSR34; 40 CFR §63.7510(e)	N/A
6.1.6	Tune-up procedures and parameters	45CSR34; 40 CFR §63.7540(a)(10)	8.1.7
6.1.7	Biennial tune-up	45CSR34; 40 CFR §63.7540(a)(11)	N/A
6.1.8	Tune-up requirements for boilers and heaters ≤5mmBtu/hr	45CSR34; 40 CFR §63.7540(a)(12)	8.1.8
6.1.9	If unit is not operating, conduct tune-up within 30 days of start-up	45CSR34; 40 CFR §63.7540(a)(13)	8.1.9
6.3.1	Compliance with tune-up standards	45CSR34; 40 CFR §63.7515(d)	8.3.1
6.4.1	Keep copies of each notification and report	45CSR34; 40 CFR §63.7555(a)(1)	8.4.1
6.4.2	Retention of records	45CSR34; 40 CFR §63.7560	8.4.2
6.5.1	Notification of Compliance Status: signed certification	45CSR34; 40 CFR §§63.7530(e) and (f)	N/A
6.5.2	Notification of Compliance Status: initial compliance demonstration	45CSR34; 40 CFR §§63.7545(e)(1) & (8)	8.5.2
6.5.3	Report submission schedule	45CSR34; 40 CFR §63.7550(b)(5)	8.5.3
6.5.4	Compliance report contents	45CSR34; 40 CFR §§63.7550(c)(1) & (5)(i) through (iii), (xiv), and (xvii)	8.5.4

Section 7.0: 40 C.F.R. 60, Subpart JJJJ Requirements for Emergency Generator [emission point ID(s): G3]

The emergency generator was manufactured after January 1, 2009 and has a maximum engine power greater than 19 KW (25 HP). The following requirements from 40 C.F.R. 60, Subpart JJJJ apply:

Condition Number	Summary of Condition	Regulatory Citation	R13-2087 Condition
7.1.1	Applicability of 40 C.F.R. 60, Subpart JJJJ	45CSR16; 40 C.F.R. §60.4230(a)(4)(iv)	6.1.1
7.1.2	Emission standards	45CSR16; 40 CFR§ 60.4233(e) and Table 1	6.1.2
7.1.3	Meet emission standards for life of engine	45CSR16; 40 C.F.R. §60.4234	6.1.3
7.1.4	Emergency engine requirements	45CSR16; 40 C.F.R. § 60.4243(d)	6.4.2
7.1.5	General provisions	45CSR16; 40 C.F.R. §60.4246	6.7.1
7.2.1	Non-resettable hour meter	45CSR16; 40 C.F.R. §60.4237(a)	6.2.1
7.3.1	Compliance demonstration	45CSR16; 40 C.F.R. §60.4243(b)(2)(ii)	6.4.1
7.3.2	Test methods for performance testing	45CSR16; 40 C.F.R. §60.4244	6.5.1
7.4.1	Recordkeeping requirements	45CSR16; 40 CFR §60.4245(a)	6.6.1
7.5.1	Records of hours of operation	45CSR16; 40 CFR §60.4245(b)	6.6.2
7.5.2	Initial notification requirements	45CSR16; 40 CFR §60.4245(c)	6.6.2
7.5.3	Submit copy of each performance test	45CSR16; 40 CFR §60.4245(d)	6.6.3
7.5.4	Annual reports	45CSR16; 40 CFR §60.4245(e)	N/A

Section 8.0: 45CSR13, Permit Requirements R13-2087 for Regeneration Gas Heater [emission point ID(s): H2]

The table below summarizes the additional requirements for the Regeneration Gas Heater from R13-2087:

Condition Number	Summary of Condition	R13-2087 Condition
8.1.1	No limit on the annual hours of operation or fuel usage	4.1.1
8.1.2	Emission limits	4.1.2
8.1.3	45CSR13 requirements	4.1.8
8.3.1	Testing requirements	4.2.1
8.3.2	Emission testing, testing protocol, and test reporting	4.2.2

Section 9.0: 45CSR13, Permit Requirements R13-2087 for Line Heater [emission point ID(s): H5]

The table below summarizes the additional requirements for the Line Heater from R13-2087:

Condition Number	Summary of Condition	R13-2087 Condition
9.1.1	Removal of H3 from service	8.1.1
9.1.2	H5 shall only burn natural gas	8.1.2
9.1.3	No limit on the annual hours of operation or fuel usage	8.1.3
9.1.4	Emission limits	8.1.4

Section 10.0: 45CSR13, Permit Requirements R13-2087 for Emergency Generator [emission point ID(s): G3]

The table below summarizes the additional requirements for the Emergency Generator from R13-2087:

Condition Number	Summary of Condition	R13-2087 Condition
10.1.1	Only burn natural gas for 500 hours a year in non-emergencies	5.1.2
10.1.2	Emission limits	5.1.3
10.2.1	Monthly and rolling twelve month records of the hours of operation	5.2.1
10.4.1	Records of hours of operation	5.4.1

Non-Applicability Determinations

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

45CSR4	<i>To Prevent and Control the Discharge of Air Pollutants into the Open Air Which Cause or Contributes to an Objectionable Odor or Odors:</i> This State Rule shall not apply to the following source of objectionable odor until feasible control methods are developed: Internal combustion engines.
45CSR10	<i>To Prevent and Control Air Pollution from the Emission of Sulfur Oxides:</i> The sulfur requirement for fuel burning units does not apply to indirect combustion sources at this site because there are no units with design heat inputs above 10 MMBtu/hr. Therefore, they are exempt in accordance with 45CSR§10-10.1.
45CSR21	<i>To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds:</i> All storage tanks at the station, which are listed as insignificant sources, are below 40,000 gallons in capacity which exempts the facility from 45CSR§21-28. The compressor station is not engaged in the extraction or fractionation of natural gas which exempts the facility from 45CSR§21-29.
45CSR27	<i>To Prevent and Control the Emissions of Toxic Air Pollutants:</i> 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 III	<i>Standards of Performance for Stationary Compression Ignition Internal Combustion Engines:</i> There are no compression ignition engines at this facility.
40 C.F.R. Part 60 Subpart OOOO	<i>Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which Construction, Modification, or Reconstruction Commenced after August 23, 2011 and on or before September 18, 2015.</i> The Storage Vessel requirements defined for transmission sources were evaluated for one tank A19, which was potentially installed in 2012 after the applicability date. However, the emission estimates showed insignificant emissions below the 6 ton/yr applicability level for VOCs in accordance with 40CFR§60.5365(e). All other vessels commenced construction, modification, or reconstruction prior to August 23, 2011.
40 C.F.R. Part 60 Subpart OOOOa	<i>Standards of Performance for Crude Oil and Natural Facilities for which Construction, Modification, or Reconstruction Commenced after September 18, 2015.</i> The GHG and VOC requirements defined by this NSPS are not applicable to this site because all affected sources commenced construction, modification, or reconstruction prior to September 18, 2015 in accordance with 40CFR§60.5365a.
40 C.F.R. Part 60 Subpart Dc	<i>Standards of Performance for Steam Generating Units.</i> The heating system boiler and line heaters at this facility are less than 10 MMBtu/hr design heat capacity, which is below the applicability criteria stated in 40CFR§60.40c(a).
40 C.F.R. Part 60 Subpart K and Ka	<i>Standards of Performance for Petroleum Liquid Storage Vessels.</i> All tanks storing VOL within the applicable size range, greater than 40,000 gallons, commenced construction after the applicability date of July 23, 1984. 40CFR§60.110a(a).

40 C.F.R. Part 60 Subpart Kb	<i>Standards of Performance for Petroleum Liquid Storage Vessels.</i> All tanks at the station are less than 19,813 gallons except for pipeline liquids tank A14 which is above 39,890 gallons in capacity but is exempt due to storing a liquid with a maximum true vapor pressure less than 3.5 kPa. Therefore, all storage vessels are exempt from this subpart as stated in the applicability criteria of 40CFR§§60.110b(a) and (b).
40 C.F.R. Part 60 Subpart KKK	<i>Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant(s).</i> The 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. Thus, the Station has no affected sources operating within this source category.
40 C.F.R. Part 60 Subpart GG	The provisions of this subpart are not applicable because there are no turbines installed at this facility
40 C.F.R. Part 63 Subpart YYYY	The provisions of this subpart are not applicable because there are no turbines installed at this Major HAP source.
40 C.F.R. Part 63 Subpart HHH	National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. The Transmission Station is not subject to Subpart HHH since there are no affected dehydration units utilized at this site.
40 C.F.R. Part 64 CAM	The compliance assurance monitoring provisions of Part 64 are not applicable due to there being no add-on controls at this facility, according to 40CFR§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: Friday, March 17, 2017
 Ending Date: Monday, April 17, 2017

Point of Contact

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

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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.