

Emissions Summary

This modification results in the following emission changes:

Regulated Pollutants	Change In Potential Emissions (tpy)
Carbon Monoxide (CO)	+0.02
Nitrogen Oxides (NO _x)	+0.02
Particulate Matter (PM ₁₀)	+1.63E-03
Total Particulate Matter (TSP)	+1.63E-03
Sulfur Dioxide (SO ₂)	+1.56E-04
Volatile Organic Compounds (VOC)	+1.18E-03
Formaldehyde	+2.4E-04
Total HAPs	+4.05E-04

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility has the potential to emit 979.43 tons/yr of NO_x, 301.35 tons/yr of CO, 100.86 tons/yr of VOC, 17.42 tons/yr of Formaldehyde and 25.14 tons/yr of aggregated 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.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Control of PM from Indirect Heat Exchangers
	45CSR13	Permits for Construction/Modification
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for HAPs
	40 C.F.R. 63 Subpart DDDDD	Boiler MACT
State Only:	None	

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

The active permits/consent orders affected by this modification are as follows:

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-3164C	4/9/2020	

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

Changes from R13-3164C have been incorporated in the Title V permit. These changes include the following:

- ❖ The design capacity of Emission Unit ID- HTR5 was changed from 0.25 to 0.30 MMBTU/hr in the Emission Units Table.
- ❖ The design capacity of Emission Unit ID- HTR5 was changed from 0.25 to 0.30 MMBTU/hr in permit Condition 9.1.10. of this Permit.
- ❖ Condition 9.1.12 was added to this permit.

Non-Applicability Determinations

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

- a. **45CSR10 – To Prevent and Control Air Pollution from the Emission of Sulfur Oxides.** WVDAQ has determined that this rule does not apply to natural gas-fired reciprocating internal combustion engines. The turbines (009T1, 009T2, 009T3, and 009T4) do not meet the definitions of either fuel burning unit, or source operation, in 45CSR§§10-2.8. and 2.19, respectively. Consequently, this rule does not apply to the turbines. Each of the heaters HTR1, HTR2, HTR3, HTR4, HTR5, and HTR6, are less than 10 MMBtu/hr design heat input. Therefore, they are exempt from the mass rate limit and other testing and MRR requirements in rule sections 3 and 6 through 8 due to the heat input being less than 10 MMBtu/hr in accordance with 45CSR§10-10.1. Additionally, none of the heaters are a source operation as defined in 45CSR§10-2.19.; therefore, 45CSR§10-4.1. is not applicable.
- b. **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 listed in 45CSR§21-1.1.; therefore, 45CSR21 is not applicable to this facility.
- c. **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.”
- d. **40 C.F.R. 60 Subpart Dc – Standards of Performance for Steam Generating Units.** The line heaters HTR2 and HTR4 at this facility are less than 10 MMBtu/hr design heat capacity, which is below the applicability criteria stated in 40 C.F.R. §60.40c(a).

- e. **40 C.F.R. 60 Subparts K, Ka – Standards of Performance for Storage Vessels for Petroleum Liquids.** All tanks (except for tank A12) at Files Creek station are below 40,000 gallons in capacity (§60.110(a) and §60.110a(a)). Tank A12 does not store petroleum liquids, hence it is exempt (§60.110(a) and §60.110a(a)).
- f. **40 C.F.R. 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.** 40 C.F.R. §60.110b(a) states, “Except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m³) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.” All tanks (except for tank A12) at Files Creek station are below 75 m³ in capacity. Since the vessels do not meet applicability criterion at 40 C.F.R. §60.110b(a), this regulation does not apply to these tanks. Tank A12 is 55,000 gallons in capacity, which is approx. 208.2 cubic meters, and stores liquid less than 3.5 kPa true vapor pressure. 40 C.F.R. §60.110b(b) states “This subpart does not apply to storage vessels with a capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure less than 15.0 kPa.” Thus, this regulation does not apply to tank A12.
- g. **40 C.F.R. 60 Subpart KKK – Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant.** Files Creek 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.
- h. **40 C.F.R. 60 Subpart GG – Standards of Performance for Stationary Gas Turbines.** As provided in 40 C.F.R. §60.4305(b), the provisions of Subpart GG are not applicable because the stationary combustion turbines (009T1, 009T2, 009T3, and 009T4) are subject to 40 C.F.R. 60 Subpart KKKK.
- i. **40 C.F.R. 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.** None of the engines at the facility are compression ignition type; therefore, this regulation does not apply.
- j. **40 C.F.R. 60 Subpart OOOO - 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.** The Storage Vessel requirements defined for transmission sources were evaluated for liquids storage vessels C09, C10, C11, C12, and C13 and were found not to be applicable because emissions are below the 6 tpy VOC threshold in accordance with 40 C.F.R. §60.5365(e). The Reciprocating Engine/Integral Compressors (00907, 00908, 00909, and 00910) at this site are not subject to this regulation due to not commencing construction, modification, or reconstruction after August 23, 2011, and on or before September 18, 2015. The turbines 009T1 and 009T2 were constructed in 2015, but their compressors are not subject to the wet seal centrifugal compressor requirements in §60.5365(b) because their compressors are dry seal type per technical correspondence received from the permittee on February 9, 2018.
- k. **40 C.F.R. 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.

1. **40 C.F.R. Part 64 – Compliance Assurance Monitoring (CAM).** The engines and tank (A12) do not have any add-on control; therefore, in accordance with 40 C.F.R §64.2(a)(2), CAM is not applicable to these sources. The turbines (009T1, 009T2, 009T3, and 009T4) utilize low-NO_x combustion controls; however, the use of combustion or other process design features or characteristics are not included in the definition of *Control device* in 40 C.F.R. §64.1. Moreover, the preamble to 40 C.F.R. Part 64 specifically states that low-NO_x burner technology is not included in the definition of *Control device* for the final rule. Since a *Control device* is not utilized for the turbines, they do not meet the applicability criterion in §64.2(a)(2) and therefore CAM is not applicable to the turbines.

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: April 21, 2020
Ending Date: May 21, 2020

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. 41283 • Fax: 304/926-0478
Beena.j.modi@wv.gov

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.