

Fact Sheet



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

Permit Number: **R30-09900014-2022**
Application Received: **August 13, 2021**
Plant Identification Number: **03-54-099-00014**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Kenova Compressor Station**
Mailing Address: **1700 MacCorkle Avenue, SE, Charleston, WV 25314**

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|--------------------|--|
| Physical Location: | Kenova, Wayne County, West Virginia |
| UTM Coordinates: | 360.9 km Easting • 4248.0 km Northing • Zone 17 |
| Directions: | Traveling I-64 West from Charleston, take the Kenova-Ceredo exit for US Route 52. Follow US 52 South approximately 2 miles to Route 1 intersection. The station is located on Route 1 near the intersection of Route 1 and Route 52. |

Facility Description

The Kenova Station is a natural gas transmission and oil and gas production 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 four (4) 2000-hp and four (4) 1100-hp natural gas fired reciprocating compressor engines, a wastewater evaporation injection system and numerous storage tanks of various sizes. On-site support equipment includes one (1) 500-hp emergency generator, one (1) 6.3 MMBtu/hr heating system boiler and one (1) 1.5 MMBtu/hr line heater. The facility also has a 1,000 gallon mercaptan tank.

Emissions Summary

| Plantwide Emissions Summary [Tons per Year] | | |
|--|----------------------------|------------------------------|
| Regulated Pollutants | Potential Emissions | 2020 Actual Emissions |
| Carbon Monoxide (CO) | 232.42 | 28.28 |
| Nitrogen Oxides (NO _x) | 1,341.63 | 449.15 |
| Particulate Matter (PM _{2.5}) | 13.50 | 9.00 |
| Particulate Matter (PM ₁₀) | 13.50 | 9.00 |
| Total Particulate Matter (TSP) | 18.26 | 11.40 |
| Sulfur Dioxide (SO ₂) | 0.23 | 0.18 |
| Volatile Organic Compounds (VOC) | 37.88 | 65.66 ⁽¹⁾ |

PM₁₀ is a component of TSP.

| Hazardous Air Pollutants | Potential Emissions | 2020 Actual Emissions |
|---------------------------------|----------------------------|------------------------------|
| Acrolein | 2.83 | Not Reported |
| Acetaldehyde | 2.86 | Not Reported |
| Benzene | 0.94 | Not Reported |
| 1-3 Butadiene | 0.38 | Not Reported |
| Ethylbenzene | 0.04 | Not Reported |
| Formaldehyde | 8.36 | 4.90 |
| n-Hexane | 0.28 | Not Reported |
| Methanol | 1.36 | Not Reported |
| Methylene Chloride | 0.05 | Not Reported |
| Toluene | 0.43 | Not Reported |
| 2,2,4 – Trimethylpentane | 0.42 | Not Reported |
| Xylene | 0.12 | Not Reported |
| Total HAPs | 18.27 | Not Reported |

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

⁽¹⁾ The reason the actual VOC emissions exceed the VOC PTE is because of the fugitive emissions. The SLEIS actual VOC emissions for calendar year 2020 used a representative gas analysis for Kenova as the basis for calculating fugitive emissions. As a part of the Title V Renewal process, Columbia collected a site-specific gas sample for Kenova in order to calculate the VOC PTE. As a result of this change, the actual VOC from fugitive emissions decreased from 47.74 tons per year as reported to 3.37 tons per year. Columbia plans to update the 2020 SLEIS using the site-specific gas sample data utilized in the Title V Renewal application.

Title V Program Applicability Basis

This facility has the potential to emit 232.42 tons per year of Carbon Monoxide and 1,341.63 tons per year of Nitrogen Oxides. 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 | To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers. |
| | 45CSR6 | Open burning prohibited. |
| | 45CSR11 | Standby plans for emergency episodes. |
| | 45CSR13 | NSR 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 Hazardous Air Pollutants |
| | 40 C.F.R. Part 61 | Asbestos inspection and removal |
| | 40CFR63 Subpart ZZZZ | National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. |
| | 40 C.F.R. Part 82, Subpart F | Ozone depleting substances |
| State Only: | 45CSR4 | No objectionable odors. |
| | 45CSR17 | To Prevent And Control 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> |
|--------------------------------|------------------|--|
| R13-2251E | October 2, 2015 | |

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

This is the fourth Title V permit renewal for this facility. There have been no changes to this facility since the last Title V permit renewal.

1.1 Emission Units

- Included the installation date of 2015 for the NSCR control devices for engines E05, E06, E07, and E08. Also included a control device table for the NSCR control devices.

3.0 Facility-Wide Requirements

- Updated to the most recent boiler-plate language. Non-boiler plate conditions did not change since there have been no changes to the underlying R13 permit (R13-2251E), 45CSR17 or the requirement for Emergency Operating Condition/Unit Replacement.

4.0 Source-Specific Requirements [emission point ID(s): BL2 and H1]

- There have been no changes to the underlying R13 permit (R13-2251E) and 45CSR2. Therefore, there were no changes made to this section.

5.0 Source-Specific Requirements [emission point ID(s): E01, E02, E03, E04, E05, E06, E07, E08, and G3]

- There have been no changes to the underlying R13 permit (R13-2251E) and no changes to the applicable requirements of 40 C.F.R. 63 Subpart ZZZZ for E01, E02, E03, E04, E05, E06, E07, and E08. There were minimal changes to the applicable requirements of 40 C.F.R. 63 Subpart ZZZZ for G3. These included removal of the vacated sections 40 C.F.R. §§63.6640 (f)(2)(ii) and (iii); and addition of requirements from 40 C.F.R. §63.6650(h).
- Old Title V conditions 5.3.1 and 5.3.2 were recordkeeping requirements located in the testing section. Therefore, they were moved to the recordkeeping section as conditions 5.4.6 and 5.4.7. The remaining condition in section 5.3. was renumbered.

6.0 Source-Specific Requirements [emission point ID(s): FL1]

- There have been no changes to the underlying R13 permit (R13-2251E). Therefore, there were no changes made to this section.

Non-Applicability Determinations

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

45CSR4 - According to 45CSR §4-7.1, this rule shall not apply to the following sources of objectionable odor until such time as feasible control methods are developed: Internal combustion engines.

45CSR10 - Is not applicable to the facility's boiler and line heater because the maximum design heat input is less than 10 MMBtu/hr.

45CSR21 - All storage tanks at the facility, 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 that facility from 45CSR§21-29.

45CSR27 - 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 Subpart Dc - 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 - All tanks at Kenova station are below 40,000 gallons in capacity.

40 C.F.R. 60 Subpart Kb - All tanks at Kenova station are below 75m³ in capacity.

40 C.F.R. 60 Subpart KKK - Kenova 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 IIII - There are no compression ignition engines at the facility.

40 C.F.R. 60 Subpart JJJJ - Engines at the facility were constructed, reconstructed, or modified prior to June 12, 2006.

40 C.F.R. 60 Subpart KKKK - There are no turbines at the facility.

40 C.F.R. 60 Subpart OOOO - The storage vessel requirements defined for transmission sources are not applicable to this site because there are no affected source storage vessels constructed, modified, or reconstructed after August 23, 2011 and before September 18, 2015 as stated in 40 C.F.R. §60.5365(e).

40 C.F.R. 60 Subpart OOOOa - The requirements defined by this NSPS are not applicable to the facility because all affected sources commenced construction prior to September 18, 2015 in accordance with 40 C.F.R. §60.5365a.

40 C.F.R. 63 Subpart HHH - 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 - There are no turbines at the facility.

40 C.F.R. 63, Subpart DDDDD - This subpart does not apply to the facility since it is not a major source of HAPs as defined in 40 C.F.R. §63.7575.

40 C.F.R. 63 Subpart JJJJJ - This subpart does not apply to the facility since the heating system boiler and line heater are fueled by natural gas as defined in 40 C.F.R. §63.11195(e).

40 C.F.R. 64 - The engines E01-E04 and G3, boiler, and heater do not have any add-on controls, and the NSCR control devices for Engines E05-E08 are exempt under 40 C.F.R. §64.2(b)(1)(i); therefore, in accordance with 40 C.F.R §64.2(a), CAM is not applicable to this facility. The Mercaptan tank is not a major source; therefore, CAM is not applicable per 40 C.F.R §64.2(a)(3).

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 8, 2022

Ending Date: May 9, 2022

Point of Contact

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

Robert Mullins
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41286
Robert.A.Mullins@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.