Fact Sheet

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

Permit Number: **R30-03900049-2022**
Application Received: **September 17, 2021**
Plant Identification Number: **03-54-039-00049**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Coco Compressor Station**
Mailing Address: **1700 MacCorkle Avenue, S.E. Charleston, WV 25314**

Physical Location: Elkview, Kanawha County, West Virginia
UTM Coordinates: 463.523 km Easting • 4250.476 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 Compressor Station is a natural gas transmission facility covered by Standard Industrial Classification (SIC) Code 4922. The station has the potential to operate twenty-four (24) hours per day, seven (7) days per week, fifty-two (52) weeks per year. The station includes five (5) 880 hp 2SLB reciprocating engines, one (1) 1,100 hp 2SLB reciprocating engine, one (1) 4,000 hp 2SLB reciprocating engine, one (1) 4.2 mmBtu/hr gas fired boiler, one (1) 9.38 mmBtu/hr regeneration gas heater, one (1) 0.12 mmBtu/hr fuel gas heater, one (1) 1,175 hp, 4SLB reciprocating engine/generator, and various liquid storage tanks.
Emissions Summary

### Plantwide Emissions Summary [Tons per Year]

<table>
<thead>
<tr>
<th>Regulated Pollutants</th>
<th>Potential Emissions</th>
<th>2020 Actual Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>71.04</td>
<td>26.28</td>
</tr>
<tr>
<td>Nitrogen Oxides (NOₓ)</td>
<td>925.38</td>
<td>354.13</td>
</tr>
<tr>
<td>Particulate Matter (PM₂.₅)</td>
<td>17.22</td>
<td>6.24</td>
</tr>
<tr>
<td>Particulate Matter (PM₁₀)</td>
<td>17.22</td>
<td>6.24</td>
</tr>
<tr>
<td>Total Particulate Matter (TSP)</td>
<td>17.22</td>
<td>6.24</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO₂)</td>
<td>0.29</td>
<td>0.10</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOC)</td>
<td>44.87</td>
<td>19.15</td>
</tr>
</tbody>
</table>

*PM₁₀ is a component of TSP.*

<table>
<thead>
<tr>
<th>Hazardous Air Pollutants</th>
<th>Potential Emissions</th>
<th>2020 Actual Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>0.68</td>
<td>-</td>
</tr>
<tr>
<td>Toluene</td>
<td>0.34</td>
<td>-</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>0.04</td>
<td>-</td>
</tr>
<tr>
<td>Xylene</td>
<td>0.10</td>
<td>-</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>0.27</td>
<td>-</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>19.27</td>
<td>7.10</td>
</tr>
<tr>
<td>Acetaldehyde</td>
<td>2.71</td>
<td>-</td>
</tr>
<tr>
<td>Other HAPs</td>
<td>4.44</td>
<td>-</td>
</tr>
<tr>
<td>Total HAPs</td>
<td>27.85</td>
<td>7.10</td>
</tr>
</tbody>
</table>

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

**Title V Program Applicability Basis**

This facility has the potential to emit 925.38 TPY of NOₓ, 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 ZZZZZ: 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**

<table>
<thead>
<tr>
<th>Permit or Consent Order Number</th>
<th>Date of Issuance</th>
<th>Permit Determinations or Amendments That Affect the Permit <em>(if any)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>R13-2087G</td>
<td>11/10/2021</td>
<td></td>
</tr>
</tbody>
</table>

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**

**Preconstruction Permit R13-2087G**

Permit R13-2087G was approved on November 10, 2021 and permitted these changes:

The following equipment will be installed at the facility:

- Two (2) 4,750 HP Caterpillar G3616 reciprocating engines/separable compressors (00808 and 00809)
- One (1) 1,175 HP Waukesha P48GL backup generator (008G4)
- One (1) 4,186 MMBTU/hr Burnham boiler (BLR4)
- One (1) 0.33 MMBTU/hr OGI TERI 375 line heater (HTR6)

The following equipment will be removed from the facility:

- Five (5) 880 HP Cooper-Bessemer GMV-8TF reciprocating engines/integral compressors (00801 thru 00805 - 2 Cycle LB installed in 1951)
- One (1) 1,100 HP Cooper-Bessemer GMVA-8 reciprocating engine/integral compressor (00806 - 2 Cycle LB installed in 1960)
- One (1) 4,000 HP Cooper-Bessemer 8W-330 reciprocating engine/integral compressor (00807 - 2 Cycle LB installed in 1979)
- One (1) 1,175 HP Waukesha VFG-P48GL backup generator (008G3 - 4 Cycle LB installed in 2016)
- One (1) 0.12 MMBTU/hr OGI TERI 125 heater (HTR5 - installed in 2016)
- One (1) 4.2 MMBTU/hr gas fired boiler (BLR3 - installed in 2012)

The following existing equipment will remain at the facility:

- One (1) 3,000 gallon pipeline liquids blow tank (A19 - installed in 2012)
- One (1) 56,400 gallon pipeline liquids water tank (A14 - installed in 1999)
- Two (2) 8,000 gallon pipeline liquids tank (A15 and A16 - installed in 1999)
- Three (3) 550 gallon methanol tanks (A20, A21 and A17 installed in 2002)
- One (1) 9.38 MMBTU/hr HEATEC, Inc. HCl-610-40-G Regeneration Heater (HTR2 - installed in 2005)
- Various small tanks (A14 thru A17, A19 thru A21) and fugitive emission sources (catalytic space heaters CH1-CH9 totaling 0.648 MMBtu/hr

Permit condition 4.1.6. in R13-2087G states: “The following equipment shall cease operation when units E08 and E09 complete commissioning and are placed in service: BLR3, 00801, 00802, 00803, 00804, 00805, 00806, 00807, 008G3 and HTR5. This equipment will be removed from site within twelve (12) months from the time E08 and E09 complete commissioning and are placed in service. The permittee shall notify the DAQ per permit condition 2.18 when this equipment is removed from service. Furthermore, the permittee shall submit a Class I administrative update permit application to remove the equipment from this permit.”

Permit conditions 6.0 and 12.0 in R13-2087G each state: “BL4 will be replacing BL3. The two (2) units will never operate at the same time. BL4 will never operate at a major source of HAPs. H6 will be replacing H5. The two (2) units will never operate at the same time. H6 will never operate at a major source of HAPs. These units will all be replaced as part of this project (R13-2087G). In order to ensure that H6 and BL4 will not operate at a major source of HAPs, the operator shall notify DAQ in accordance with permit condition 4.1.6 and permit condition 2.8 when the commissioning of E08 and E09 is completed. This single notification will ensure that BL4 and H6 will not operate at a major source of HAPs.”

When new engines 00808 (E08) and 00809 (E09) complete commissioning and are placed in service, the listed existing equipment (BLR3, 00801, 00802, 00803, 00804, 00805, 00806, 00807, 008G3 and HTR5) must cease operation and the permittee must notify the DAQ. Then the permittee must submit a Class I administrative update to remove the equipment from permit R13-2087G. In accordance with Section 4.1.a.2. of WV rule 45CSR30 (Title V), the facility is then required to file a complete application to obtain the Title V operating permit revision within twelve (12) months of the date the new equipment is placed in service.
However, once the transition from the old equipment to the new equipment takes place, the facility will no longer have the potential to emit one hundred (100) tpy or more of any criteria pollutant, ten (10) tons per year (tpy) or more of any hazardous air pollutant which has been listed pursuant to §112(b) of the Clean Air Act, or twenty-five (25) tpy or more of any combination of such hazardous air pollutants. Therefore, the facility will become a minor source. The permittee must then submit a letter to the WV DAQ requesting to declare their Title V permit inactive and must also submit a revised Certified Emission Statement (CES) registration form which reports the facility’s new potential emissions.

Due to all of the information explained above, the renewal permit will only include the existing equipment at the facility, none of which has been modified or changed in any way since the last renewal.

This is a renewal of the Title V Operating Permit R30-03900049-2017, which was issued on May 1, 2017. Permit R13-2087G incorporated a new boiler plate format and language, which results in a change in many of the permit condition references in this renewal permit. Substantial changes consist of the following:

1) **UTM Coordinates** – They have been updated from 463.6 km Easting and 4250.3 km Northing to 463.523 km Easting and 4250.476 km Northing based on the more accurate information provided by the company in the renewal application.

2) **Condition 1.1** - Tanks A14 through A17 and A19 through A21 are existing permitted equipment at the facility and were addressed in the non-applicability determination (40 C.F.R. Part 60 Subpart OOOO, K and K2, and K3), but were not previously included in the emission units table. These tanks have now been added in the emission units table.

3) **Condition 1.2** – The active R13 Permit was updated to R13-2087G issued on November 10, 2021.

4) **Title V Boilerplate changes**

   ➢ **Condition 2.11.4.** – The reference notation was changed from 45CSR§30-2.39 to 45CSR§30-2.40 because this definition was renumbered in 45CSR30.

   ➢ **Condition 2.22.1.** - The reference notation was changed to delete 45CSR38 because it has been repealed.

   ➢ **Condition 3.5.3.** - The EPA contact information and address were updated.

5) **Section 4.0: 45CSR13, Permit Requirements R13-2087 for Indirect Natural Gas Heaters and Boilers less than 10 MMBtu/hr [emission point ID(s): H2, H5 and BL3]**

   ➢ **Condition 4.1.1.** - This new permit condition and table from R13-2087G were added.

   ➢ **Condition 4.1.2.** - This existing permit condition was moved to section 4.

   ➢ **Condition 4.1.3.** - This was formerly condition 4.1.1., but was renumbered and the reference to R13-2087G was updated.

   ➢ **Condition 4.2.1.** - The former condition was replaced with an equivalent permit condition taken directly from R13-2087G.

   ➢ **Condition 4.3.1.** – This was formerly condition 4.1.2., but was moved to the Testing Requirements and renumbered.

   ➢ **Condition 4.4.1.** - This new permit condition from R13-2087G was added.

   ➢ **Condition 4.5.1.** - This new permit condition from R13-2087G was added.
6) 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]

- **Condition 5.1.2.** – The permit condition reference to R13-2087G was deleted. Vacated sections §§40 C.F.R. 63.6640(f)(2)(ii) and (iii) were deleted.

- **Condition 5.5.2.** – The permit condition reference to R13-2087G was deleted.

7) 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]

- **Conditions 6.1.4., 6.1.6., 6.1.8 and 6.1.9** – The permit condition references to R13-2087G were updated.

- **Condition 6.3.1.** – The permit condition reference to R13-2087G was updated.

- **Conditions 6.4.1. and 6.4.2** – The permit condition references to R13-2087G were updated.

- **Conditions 6.5.2., 6.5.3 and 6.5.4** – The permit condition references to R13-2087G were updated.

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

- **Conditions 7.1.1., 7.1.4 and 7.1.5** – The permit condition references to R13-2087G were deleted. For condition 7.1.4, vacated sections 40 C.F.R. §§60.4243(d)(2)(ii) and (iii) were deleted.

- **Conditions 7.1.2. and 7.1.3.** – The permit condition reference to R13-2087G was updated.

- **Condition 7.2.1.** – The permit condition reference to R13-2087G was deleted.

- **Conditions 7.3.1. and 7.3.2.** – The permit condition references to R13-2087G were updated.

- **Condition 7.4.1.** – The permit condition reference to R13-2087G was updated.

- **Conditions 7.5.1., 7.5.2. and 7.5.3.** – The permit condition references to R13-2087G were updated.

9) Former Section 8.0: 45CSR13, Permit Requirements R13-2087 for Regeneration Gas Heater [emission point ID(s): H2] – This section was deleted because the requirements were rolled together into Section 4.0: 45CSR13, Permit Requirements R13-2087 for Indirect Natural Gas Heaters and Boilers less than 10 MMBtu/hr [emission point ID(s): H2, H5 and BL3].

10) Former Section 9.0: 45CSR13, Permit Requirements R13-2087 for Line Heater [emission point ID(s): H5] – This section was deleted because the requirements were rolled together into Section 4.0: 45CSR13, Permit Requirements R13-2087 for Indirect Natural Gas Heaters and Boilers less than 10 MMBtu/hr [emission point ID(s): H2, H5 and BL3].

11) Renumbered Section 10.0 to Section 8.0: 40 C.F.R. 60, 45CSR13, Permit Requirements R13-2087 for Emergency Generator [emission point ID(s): G3]

- **Condition 8.1.1.** – The permit condition language and the reference to R13-2087G were updated.
Condition 8.1.2. – The permit condition language from R13-2087G was updated.

Condition 8.1.3. – This permit condition was added as it was new from R13-2087G.

Condition 8.2.1. – The permit condition and reference to R13-2087G were deleted.

Conditions 8.4.1. – The permit condition language and reference to R13-2087G were updated.

12) New Section 9.0: 45CSR13, Permit Requirements R13-2087 for Tanks [emission point ID(s): T14, T15, T16, T17, T19, T20 and T21] – This section was added to incorporate the permit requirements from R13-2087G for the existing tanks.

Non-Applicability Determinations

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>45CSR4</td>
<td>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 feasible control methods are developed: Internal combustion engines.</td>
</tr>
<tr>
<td>45CSR10</td>
<td>To Prevent and Control Air Pollution from the Emission of Sulfur Oxides: 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.</td>
</tr>
<tr>
<td>45CSR21</td>
<td>To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds: 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.</td>
</tr>
<tr>
<td>45CSR27</td>
<td>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.”</td>
</tr>
<tr>
<td>40 C.F.R. Part 60 Subpart III</td>
<td>Standards of Performance for Stationary Compression Ignition Internal Combustion Engines: There are no compression ignition engines at this facility.</td>
</tr>
<tr>
<td>40 C.F.R. Part 60 Subpart OOOO</td>
<td>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 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.</td>
</tr>
<tr>
<td>40 C.F.R. Part 60 Subpart OOOOa</td>
<td>Standards of Performance for Crude Oil and Natural Facilities for which Construction, Modification, or Reconstruction Commenced after September 18, 2015. 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.</td>
</tr>
<tr>
<td>40 C.F.R. Part 60 Subpart Dc</td>
<td>Standards of Performance for Steam Generating Units. 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§60.40(a).</td>
</tr>
<tr>
<td>40 C.F.R. Part 60 Subpart K and Ka</td>
<td>Standards of Performance for Petroleum Liquid Storage Vessels. 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).</td>
</tr>
</tbody>
</table>
40 C.F.R. Part 60 Subpart Kb  Standards of Performance for Petroleum Liquid Storage Vessels.  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  Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant(s).  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: August 2, 2022
Ending Date: September 1, 2022

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

Daniel P. Roberts
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41902
Daniel.p.roberts@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)
On September 16, 2022, Gwen Supplee of the EPA sent an email stating that “EPA reviewed the draft permit, and we do not have any comments to offer on the Draft/Proposed Title V Renewal for Columbia Gas Transmission, LLC; Coco Compressor Station.”