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

Permit Number: R30-03500003-2017
Application Received: June 24, 2016
Plant Identification Number: 03500003
Permittee: Columbia Gas Transmission, LLC
Facility Name: Ripley Compressor Station
Mailing Address: 1700 MacCorkle Avenue, SE
Charleston, WV 25314

Physical Location: Ripley, Jackson County, West Virginia
UTM Coordinates: 440.1 km Easting • 4303.4 km Northing • Zone 17
Directions: Traveling I-77N from Charleston, exit at Ripley onto US Rte. 33 and proceed to the town of Ripley and the intersection with Secondary Rte. 21 (formerly US & State Rte. 21). Turn left onto Rte. 21 and continue approximately 5.5 miles to the station which is on the left.

Facility Description
The Ripley Station is a natural gas transmission 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 two (2) 2,250-hp natural gas fired reciprocating engines, two (2) 306-hp emergency generators, one (1) 31 HP air compressor, one (1) heating system boiler, one (1) fuel heater, one (1) liquids knockout system, one (1) wastewater evaporator and thirteen (13) storage tanks of various sizes.
Emissions Summary

Plantwide Emissions Summary [Tons per Year]

<table>
<thead>
<tr>
<th>Regulated Pollutants</th>
<th>Potential Emissions</th>
<th>2015 Actual Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>153.75</td>
<td>15.09</td>
</tr>
<tr>
<td>Nitrogen Oxides (NOx)</td>
<td>222.99</td>
<td>54.4</td>
</tr>
<tr>
<td>Particulate Matter (PM_{2.5})</td>
<td>8.58</td>
<td>2.21</td>
</tr>
<tr>
<td>Particulate Matter (PM_{10})</td>
<td>8.58</td>
<td>2.21</td>
</tr>
<tr>
<td>Total Particulate Matter (TSP)</td>
<td>8.58</td>
<td>2.8</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO_{2})</td>
<td>0.15</td>
<td>0.04</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOC)</td>
<td>25.18</td>
<td>6.90</td>
</tr>
</tbody>
</table>

*PM_{10} is a component of TSP.*

<table>
<thead>
<tr>
<th>Hazardous Air Pollutants</th>
<th>Potential Emissions</th>
<th>2015 Actual Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>0.37</td>
<td>Not reported</td>
</tr>
<tr>
<td>Toluene</td>
<td>0.18</td>
<td>Not reported</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>0.02</td>
<td>Not reported</td>
</tr>
<tr>
<td>Xylene</td>
<td>0.05</td>
<td>Not reported</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>0.10</td>
<td>Not reported</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>9.76</td>
<td>3.17</td>
</tr>
<tr>
<td>Acetaldehyde</td>
<td>1.37</td>
<td>Not reported</td>
</tr>
<tr>
<td>Total HAPs</td>
<td>14.16</td>
<td>Not reported</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 153.75 tons/yr of CO and 222.99 tons/yr of NOx. 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 Indirect Heat Exchangers
45CSR6 Open burning prohibited.
45CSR11 Standby plans for emergency episodes.
WV Code § 22-5-4 (a) (14)
The Secretary can request any pertinent information such as annual emission inventory reporting, Operating permit requirement.

45CSR30

45CSR34
Emission Standards for Hazardous Air Pollutants for Source Categories Pursuant to 40 CFR, Part 63

40 C.F.R. Part 61
Asbestos inspection and removal

40 C.F.R. 63, Subpart ZZZZ
NESHAPs MACT for Stationary RICEs

40 C.F.R. Part 82, Subpart F
Ozone depleting substances

State Only:

45CSR4
No objectionable odors.

45CSR17
Particulate Fugitive

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 (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></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

Permit Determination PD16-026 was received on April 13, 2016 from Columbia Gas Transmission, LLC, Ripley Compressor Station. Changes from the Permit Determination have been incorporated in the Title V permit. The change includes the following:

- Emission Unit ID BLR1(4 MMBtu/hr natural gas fired boiler) was replaced with Emission Unit ID BLR2 (3.68 MMBtu/hr natural gas fired boiler) in the Emission Unit Table.

The increase in emissions did not exceed two (2) lbs/hr or five (5) tons/year of total Hazardous Air Pollutants (HAPs); six (6) lbs/hour and ten (10) TPY of any regulated pollutant; or, trigger a substantive requirement of any State or Federal air quality regulation. Therefore, a permit was not required by this Division for the above-mentioned boiler replacement as stated in the June 13, 2016 no permit needed letter.

Additionally, Emission Unit ID 062A1 (Reciprocating Engine/Air Compressor-30HP) was replaced with Emission Unit ID 062A2(Reciprocating Engine/Air Compressor-31HP) in the Emission Unit Table.
40 C.F.R. Part 60, Subpart JJJJ and 40 C.F.R Part 63, Subpart ZZZZ—Emission Unit ID 062A2 (Reciprocating Engine/Air Compressor-31HP- installed in 2008) qualifies as a new stationary source at an area source of HAP emissions which commenced construction on or after June 12, 2006 per 40 C.F.R. § 63.6590 (a)(2)(iii). It shall comply with the requirements of 40 C.F.R Part 63, subpart ZZZZ by meeting the requirements of 40 C.F.R 60 subpart JJJJ per 40 C.F.R. § 63.6590 (c)(1), but per 40 C.F.R. § 60.4230(a)(4)(iv) only emergency units manufactured on or after January 1, 2009 are subject to this subpart. Therefore, no emission or work practice standards will apply to this unit due to it being operated at a minor source of HAPs.

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>Requirement Reference</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 such time as feasible control methods are developed: Internal combustion engines.</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 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 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 are not applicable to this site because all vessels commenced construction, modification or reconstruction prior to August 23, 2011 in accordance with 40CFR§60.5365.</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 heater at this facility are both less than 10 MMBtu/hr design heat capacity, which makes them below the applicability criteria stated in 40CFR§60.40e(a). Additionally, the line heater is not considered a Steam Generating Unit in accordance with the definitions of the Subpart.</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 at the station are below the applicability criteria of 40,000 gallons in capacity as stated in 40CFR§§60.110(a) and 60.110(a).</td>
</tr>
<tr>
<td>40 C.F.R. Part 60 Subpart Kb</td>
<td>Standards of Performance for Volatile Organic Liquid Storage Vessels. All tanks at the station are below the applicability criteria of 19,813 gallons in capacity as stated in 40CFR§60.110b(a).</td>
</tr>
</tbody>
</table>
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. As a result, the station has no affected sources operating within this source category.

40 C.F.R. Part 63 Subpart HHH  National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. The 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: Tuesday, April 18, 2017
Ending Date: Thursday, May 18, 2017

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. 1228 • Fax: 304/926-0478
Beena.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)
None