West Virginia Department of Environmental Protection Division of Air Quality





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

Permit Number: **R30-03300011-2022** Application Received: **October 15, 2021** Plant Identification Number: **03-54-033-00011** Permittee: **Eastern Gas Transmission and Storage, Inc.** Facility Name: **Wilsonburg Compressor Station** Mailing Address: **925 White Oaks Blvd., Bridgeport, WV 26330**

Physical Location:Wilsonburg, Harrison County, West VirginiaUTM Coordinates:549.9 km Easting • 4,348.7 km Northing • Zone 17Directions:From the intersection of Route 50 and SR98 near Clarksburg, go west on
Route 50 for 1.3 miles to the intersection. Turn right onto Old Davisson
Run Road and travel 100 feet to a gravel road on the right. Go through the
gate and follow the gravel road to the station.

Facility Description

Wilsonburg Compressor Station of Eastern Gas Transmission and Storage, Inc. (SIC: 4922 and NAICS: 486120) is a compressor facility that services a natural gas pipeline system. The facility consists of two (2) natural gas-fired reciprocating engines, one (1) glycol dehydrator system with a flare, one (1) dehydration unit reboiler, two (2) emergency generators, and six (6) aboveground storage tanks. The compressor engines at the facility receive natural gas flowing through a valve on the pipeline and recompress the natural gas to further transport the natural gas through the pipeline system. Prior to exiting the facility through the pipeline, the compressed natural gas is processed by a dehydration unit to remove moisture and impurities from the gas stream.

Emissions Summary

| Plantwide Emissions Summary [Tons per Year] | | | | | |
|---|---------------------------------|-----------------------|--|--|--|
| Regulated Pollutants | Potential Emissions | 2020 Actual Emissions | | | |
| Carbon Monoxide (CO) | 34.97 | 19.6 | | | |
| Nitrogen Oxides (NO _X) | 186.42 | 126.7 | | | |
| Particulate Matter (PM _{2.5}) | 2.12 | < 0.01 | | | |
| Particulate Matter (PM ₁₀) | 2.12 | 0.17 | | | |
| Total Particulate Matter (TSP) | 2.56 | 0.17 | | | |
| Sulfur Dioxide (SO ₂) | 0.03 | 0.01 | | | |
| Volatile Organic Compounds (VOC) | 119.30 ¹ | 53.2 | | | |
| PM | I_{10} is a component of TSP. | | | | |
| Hazardous Air Pollutants ² | Potential Emissions | 2020 Actual Emissions | | | |
| Acetaldehyde | 0.32 | 0.13 | | | |
| Acrolein | 0.32 | 0.13 | | | |
| Benzene | 0.34 | 0.06 | | | |
| Ethylbenzene | 0.17 | < 0.01 | | | |
| Formaldehyde | 2.28 | 0.93 | | | |
| Hexane | 0.53 | 0.04 | | | |
| Toluene | 0.51 | 0.05 | | | |
| Xylene | 1.45 | 0.03 | | | |
| Total HAPs | 5.92 | 1.38 | | | |

¹ The increase in VOC potential emissions was due to recalculating the fugitive potential-to-emit to include facility blowdowns in the calculation. The calculation was based on a 2019 gas sample from the gas processed at the facility.

² Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 186.42 tons per year of Nitrogen Oxides (NO_x) and 119.30 tons per year of Volatile Organic Compounds (VOCs). Due to this facility's potential to emit over 100 tons per year of criteria pollutants, Eastern Gas Transmission and Storage, Inc. 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 | Permits for construction, modification, relocation, and |
| | | operation of stationary sources of air pollutants, |
| | | notification requirements, administrative updates, |
| | | temporary permits, general permits, and procedures |
| | | for evaluation. |
| | 45CSR16 | Standards of performance for 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 | Emission standards for hazardous air pollutants. |
| | 40 C.F.R. Part 60, Subpart JJJJ | Standards of performance for stationary spark ignition |
| | | internal combustion engines. |
| | 40 C.F.R. Part 61 | Asbestos inspection and removal. |
| | 40 C.F.R. Part 63, Subpart HH | National emission standards for hazardous air |
| | | pollutants from oil and natural gas production |
| | | facilities. |
| | 40 C.F.R. Part 63, Subpart ZZZZ | National emission standards for hazardous air |
| | | pollutants for stationary 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 particulate matter air pollution |
| | | from materials handling, preparation, storage, and |
| | | other sources of 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 | Date of | Permit Determinations or Amendments That |
|----------------------|--------------|--|
| Consent Order Number | Issuance | Affect the Permit (<i>if any</i>) |
| R13-2856B | May 07, 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

The following changes have been made to the current Title V Operating Permit for this permit renewal:

- 1. Throughout 2022 Permit Renewal
 - i. On December 04, 2020, the owner/operator sent a notice for the company's name to be changed for several facilities, including Wilsonburg Compressor Station. Throughout this renewal, the company's name has been changed from Dominion Transmission, Inc. to Eastern Gas Transmission and Storage, Inc.
- 2. Section 2.11. Operational Flexibility
 - i. The authority of Condition 2.11.4. has been updated to 45CSR§30-2.40. due to a change in 45CSR30.
- 3. Section 2.22. Credible Evidence
 - i. The authority of Condition 2.22.1. has been updated to 45CSR§30-5.3.e.3.B. due to the repeal of Rule 45CSR38 by Senate Bill No. 163.
- 4. Section 3.5. Reporting Requirements
 - i. Condition 3.5.3. has been updated to show changes that have been made to the U.S. EPA designee/address.
- 5. Section 3.7. Permit Shield (Facility-Wide Requirements)
 - i. Condition 3.7.2.a. was changed to note that 45CSR§10-4.1. and 45CSR§10-5.1. are not applicable facility-wide, rather than only not applicable to the compressor engines.
 - a. Since the facility does not have the potential-to-emit 500 pounds per year of sulfur oxides, the facility is not subject to 45CSR§10-4.1. via 45CSR§10-4.1.e.
 - b. 45CSR§10-5.1. does not permit the combustion of any process gas stream with a hydrogen sulfide concentration greater than 50 grains per 100 cubic feet. However, the emission units at the facility are fueled by pipeline quality natural gas which has a maximum sulfur content of 20 grains of hydrogen sulfide per 100 cubic feet. Therefore, 45CSR§10-5.1. is not applicable to the facility.
 - ii. Condition 3.7.2.d. of the renewal permit was added because 40 C.F.R. 60 Subpart OOOOa is nonapplicable to the facility and a permit shield was requested. This subpart is non-applicable because there are no affected facilities as described in 40 C.F.R. §§60.5365a(a-j) located at the Wilsonburg Compressor Station that commenced construction following the applicability date.
 - iii. Condition 3.7.2.e. of the renewal permit was updated to include the determination that 40 C.F.R. 63 Subpart HHH is also not applicable to the facility because 40 C.F.R. §63.1270(a) excludes compressor stations that transport natural gas prior to the point of custody transfer or prior to a natural gas processing plant from the natural gas transmission and storage source category.

- 6. Section 5.1. Limitations and Standards (Dehydration Unit and Flare)
 - i. The requirement in Condition 5.1.9. of the current Title V Operating Permit was removed from this renewal. This requirement was based on the applicability of 45CSR§10-4.1. to the dehydration unit and flare. However, as previously stated, the facility is not subject to this requirement via 45CSR§10-4.1.e.
 - ii. The requirement in Condition 5.1.10. of the current Title V Operating Permit was removed from this renewal. This requirement was based on the applicability of 45CSR§10-5.1. to the dehydration unit and flare. However, as previously stated, the facility is not subject to this requirement as the emission units at the facility are fueled by pipeline quality natural gas.
- 7. Section 5.2. Monitoring Requirements (Dehydration Unit and Flare)
 - i. Conditions 5.2.4. and 5.2.5. have been removed from the renewal permit. These monitoring requirements were included to demonstrate compliance with the limits established by Conditions 5.1.9. and 5.1.10., respectively, of the current operating permit which were removed from the renewal.
- 8. Section 5.3. Testing Requirements (Dehydration Unit and Flare)
 - i. The requirement of Condition 5.3.1. of the current Title V Operating Permit was first included with the installation of the Cameron flare (F2) as permitted in R13-2856A and R30-03300011-2011. When F2 was replaced with the Questor Q100 flare (F3) under R13-2856B, the requirement (also Condition 5.3.1.) remained in R13-2856B. The Engineering Evaluation for R13-2856B states that "The current monitoring requirements for the Cameron flare [F2] will continue to exist for the Questor Q100 flare [F3]." For this reason, Condition 5.3.1. was updated to remove the reference to R13-2856A and replace it with R13-2856B.
 - a. Condition 5.3.1. requires the permittee to conduct an initial Method 22 opacity test for two hours to demonstrate that the flare F3 is in compliance with Condition 5.1.4.b. The facility has demonstrated compliance with this requirement in a test conducted on May 31, 2016. Condition 5.3.1. will remain in the permit renewal as a reference for the recordkeeping requirement found in Condition 5.4.5. of both R13-2856B and the operating permit.
- 9. Section 5.5. Reporting Requirements (Dehydration Unit and Flare)
 - i. Condition 5.5.3. of the current permit was removed from the renewal. This condition covers the same reporting requirements for any violation of allowable visible emissions found when making observations using 40 C.F.R. Part 60, Appendix A, Method 9 as those written in Condition 5.5.1., which is authorized by R13-2856B and applies to any deviation of allowable visible emissions found when making observations using 40 C.F.R. Part 60, Appendix A, Method 9 or 22.
- 10. Section 6.1. Limitations and Standards (Emergency Generators)
 - i. Paragraphs b.(ii) and b.(iii) of Condition 6.1.8. have been removed from the renewal permit as 40 C.F.R. §§60.4243(d)(2)(ii) and (iii) have been vacated.
- 11. Section 6.4. Recordkeeping Requirements (Emergency Generators)
 - i. Condition 6.4.1. was updated to account for changes in 40 C.F.R. §60.4245(a)(3). The referral to the requirements of 40 C.F.R. Parts 90 and 1048 was removed and replaced with 40 C.F.R. Parts 1048, 1054, and 1060.

- 12. Section 6.5 Reporting Requirements (Emergency Generators)
 - i. The reporting requirements of 40 C.F.R. §60.4245(e) have been incorporated into Condition 6.5.1. of the renewal permit. These requirements are applicable to the emergency engines if they are operated as specified in 40 C.F.R. §60.4243(d)(3)(i).

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 Since the facility does not have the potential-to-emit 500 pounds per year of sulfur oxides, the facility is not subject to 45 CSR §10-4.1. via 45 CSR §10-4.1.e. Additionally, the facility utilizes pipeline quality natural gas as a fuel source and, therefore, does not combust a process gas stream with a hydrogen sulfide concentration greater than 50 grains per 100 cubic feet of gas since pipeline quality natural gas combusted cannot contain more than 20 grains of hydrogen sulfide per 100 cubic feet. Thus, 45 CSR §10-5.1. is not applicable to the facility.
- b. **40 C.F.R. 60 Subpart JJJJ** *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines* – The compressor engines EN02 and EN03 were installed in 1987 and 1983, respectively, and therefore are not subject to this subpart since they were installed before the applicability date.
- c. 40 C.F.R. 60 Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After August 23, 2011 and on or Before September 18, 2015 – There are no affected facilities located at the Wilsonburg Compressor Station that commenced construction, modification, or reconstruction after August 23, 2011.
- d. **40 C.F.R. 60 Subpart OOOOa** *Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015* There are no affected facilities located at the Wilsonburg Compressor Station that commenced construction, modification, or reconstruction after September 18, 2015.
- e. **40 C.F.R. 63 Subpart HHH** *National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities* The facility is a compressor station and is therefore not considered a part of the natural gas transmission and storage category via 40 C.F.R. §63.1270(a). Furthermore, this facility is not defined as a major source of HAPs. Thus, this subpart is not applicable to the facility.
- f. **40** C.F.R. **63** Subpart DDDDD National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters The facility is not defined as a major source of HAPs. Therefore, this subpart is not applicable to the reboiler.
- g. 40 C.F.R. 63 Subpart JJJJJJ National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources – The reboiler (RBR02) is a gas-fired "process heater" and therefore excluded from the definition of "boiler" pursuant to 40 C.F.R. §63.11237.
- h. **40** C.F.R. **64** *Compliance Assurance Monitoring* The facility does not have any pollutant specific emission units (PSEU) that satisfied all the applicability criteria requirements of 40 C.F.R. §64.2(a). There have been no changes to any equipment at the facility since the previous renewal was issued, so CAM remains non-applicable to any of the emission units listed in the renewal application.

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: | July 15, 2022 |
|-----------------|-----------------|
| Ending Date: | August 15, 2022 |

Point of Contact

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

Sarah Barron West Virginia Department of Environmental Protection Division of Air Quality 601 57th Street SE Charleston, WV 25304 304/926-0499 ext. 41915 sarah.k.barron@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)

No comments were received.