

# Fact Sheet



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

Permit Number: **R30-03300013-2022**  
Application Received: **August 5, 2021**  
Plant Identification Number: **03-54-033-00013**  
Permittee: **Eastern Gas Transmission and Storage, Inc.**  
Facility Name: **Sardis Compressor Station**  
Mailing Address: **925 White Oaks Blvd., Bridgeport, WV 26330**

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Physical Location: Sardis, Harrison County, West Virginia  
UTM Coordinates: 552.89 km Easting • 4355.61 km Northing • Zone 17  
Directions: Interstate 79 North to the Clarksburg exit (Exit 119). Turn left off the exit ramp onto Route 50 West toward Clarksburg. Continue on Route 50W for about 5.8 miles. Turn right onto County Road 5035 for about 0.4 miles to Wilsonburg Rd. Turn right at the stop sign onto Wilsonburg Rd for about 0.7 miles and then turn right onto Route 9 (Gregory Run Road). Continue on Route 9 for about 5.1 miles. Turn right on Sardis Station Rd. at the facility sign and continue for about 0.5 mile to the station.

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### **Facility Description**

Sardis Compressor Station is a natural gas compressor facility covered by Standard Industrial Classification (SIC) Code 4922 and North American Industry Classification System (NAICS) Code 486120. The Sardis Station consists of one (1) 1000 HP natural gas fired reciprocating engine (EN01), one (1) 800 HP natural gas fired reciprocating engine (EN02), one (1) 750 HP natural gas fired reciprocating engine (EN03), two (2) 192.5 HP emergency generators (EG01 and EG02), one (1) glycol dehydrator system (DEHY02), one (1) dehydration unit reboiler (RBR02), one (1) 4 MMBtu/hr dehydration unit still flare (FL03) and eight (8) above ground storage tanks (TK01 through TK08). The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day.

## Emissions Summary

<b>Plantwide Emissions Summary [Tons per Year]</b>		
<b>Regulated Pollutants</b>	<b>Potential Emissions</b>	<b>2020 Actual Emissions</b>
Carbon Monoxide (CO)	33.69	19.89
Nitrogen Oxides (NO <sub>x</sub> )	435.39	167.25
Particulate Matter (PM <sub>2.5</sub> )	3.39	0.15
Particulate Matter (PM <sub>10</sub> )	3.39	0.41
Total Particulate Matter (TSP)	4.27	0.79
Sulfur Dioxide (SO <sub>2</sub> )	0.05	0.03
Volatile Organic Compounds (VOC)	173.88	75.61

*PM<sub>10</sub> is a component of TSP.*

<b>Hazardous Air Pollutants</b>	<b>Potential Emissions</b>	<b>2020 Actual Emissions</b>
Acetaldehyde	0.68	0.26
Acrolein	0.58	0.26
Benzene	0.64	0.11
Ethylbenzene	0.31	0.02
Formaldehyde	4.62	1.86
Hexane	0.69	0.30
Toluene	0.96	0.11
Xylenes (mixed isomers)	2.28	0.15
Aggregate HAPs	10.76	3.07

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

### Title V Program Applicability Basis

This facility has the potential to emit 435.39 tpy of Nitrogen Oxides and 173.88 tpy of Volatile Organic Compounds. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Eastern Gas Transmission and Storage, Inc.'s Sardis Compressor Station 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 Pursuant to 40 CFR Part 60
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
45CSR30	Requirements For Operating Permits.
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 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
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 Emissions 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 Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit <i>(if any)</i>
G60-C026	January 4, 2011	
R13-2915A	May 8, 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 a renewal of the Title V permit which was issued on February 7, 2017. Unless otherwise noted, the terminology "current permit" or "CP" means Title V Operating Permit R30-03300013-2017. Substantial changes to the most recent version of the current Title V Permit consist of the following:

- 1) **Cover Page, Page 1, and Header** - The company name has been updated from Dominion Transmission, Inc. to Eastern Gas Transmission and Storage, Inc.
- 2) **Title V Boilerplate changes**
  - **Conditions 3.5.3., 3.5.5. and 3.5.6.** - These conditions were revised to require electronic submittal of the Title V compliance certifications (annual and semi-annual), self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols to the WV DAQ.
- 3) **Condition 1.1. - Emission Units Table**
  - "*Manufactured 11/2010*" has been added to the description for each of the emergency generators EG01 and EG02.
  - The footnote "\* Equipment burns or combusts pipeline quality natural gas only" at the end of the table in the current permit has been deleted in the renewal permit. The current permit does not have any equipment marked with an asterisk for which the footnote would correspond.
- 4) **Condition 3.4.1.** – "G60-C026 General Permit Registration, and G60-C, Condition 4.2.1." has been added to the citation of authority.
- 5) **Conditions 4.1.4. and 4.4.1.** – Since Section 4.0. contains requirements only for the dehydration unit reboiler, "RBR02" has been removed from after the citation of authority and "(RBR02)" has been included in the language of these conditions to match the language of R13-2915A.
- 6) **Condition 4.1.5.** – "(RBR02)" has been included in the language of this condition to match the language of R13-2915A.
- 7) **Conditions 5.1.6.(CP) and 5.2.3.(CP)** – These conditions of the current permit have not been included in the renewal permit. 45CSR§10-4.1 sets an in-stack sulfur dioxide concentration limit of 2,000 parts per million by volume, but 45CSR§10-4.1.e. exempts facilities from this limit if the potential to emit SO<sub>2</sub> is less than 500 lbs/year. The Sardis Compressor Station is exempt from 45CSR§10-4.1 since their reported facility-wide PTE of SO<sub>2</sub> is 100 lbs/year.
- 8) **Conditions 5.1.7.(CP) and 5.2.4.(CP)** – These conditions of the current permit have not been included in the renewal permit. Pipeline-quality natural gas does not contain more than 20 grains total sulfur per 100 cubic feet of gas which is much less than 50 grains H<sub>2</sub>S per 100 cubic feet of gas required under 45CSR§10-5.1. Therefore, Sardis Compressor Station is not subject to 45CSR§10-5.1.

- 9) **Condition 5.2.2.** – Pursuant to EPA’s previous guidance, and since this a 45CSR30 requirement, the exemption for start-ups, shut-downs and malfunctions have been removed from this condition.
- 10) **Condition 5.3.5.** – The current permit has “orphaned” numbering that was taken from 40 CFR§63.772(b)(2)(i), (example: 5.3.5. with the second level of (2) and a third level numbered a (i)). This condition has been “cleaned up” by removing the sub-level numbering. Also the first sentence of this condition has been revised as the following: *The determination of actual average benzene or BTEX emissions from a glycol dehydration unit shall be made using the following procedures of paragraph (2)(i) of this condition.* There were no changes to the applicable requirement.
- 11) **Section 6.0** – This section of the current permit contains requirements that are incorporated by reference from the General Permit G60-C, 40 CFR 60, Subpart JJJJ and 40 CFR 63, Subpart ZZZZ. The applicable requirements from G60-C, Subpart JJJJ and Subpart ZZZZ have been written into the renewal permit as specific requirements thereby removing the incorporation by reference. The current permit has an Appendix that contains G60-C. Since the requirements of General Permit are no longer incorporated by reference in the renewal permit, the Appendix has been deleted. Additionally, conditions 6.3.2 and 6.4.4 were added under the authority of 45CSR§30-5.1.c to demonstrate compliance with the general permit requirements for the catalytic reduction devices.
- 12) **Section 7.0** – Some of the formatting in this section of the renewal permit regarding the condition numbering has been revised to try and make the permit more consistent throughout. The revisions include the numbering convention hierarchy so that the numbering of the conditions is the same throughout the permit. These revisions did not result in any change in the applicable requirements. The numbering format for the renewal permit for example, is as follows: the main condition number 4.1.1., 4.1.2., 4.1.3. etc., with a second level being a., b., c. etc. and third level being 1., 2., 3. etc. The following permit conditions in the renewal permit are affected by this renumbering: 7.1.9., 7.1.18., 7.1.21., 7.1.22., 7.2.1., 7.2.3., 7.3.1., 7.4.2., 7.4.7., 7.5.2. through 7.5.5. and 7.5.10.
- 13) **Condition 7.1.3. (current permit)** – This condition in the current permit is a requirement pertaining to initial compliance. Since this requirement has been fulfilled, it is no longer applicable and therefore is not included in the renewal permit. The subsequent permit conditions have been renumbered.
- 14) **Condition 7.1.3. (7.1.4. CP).** – The generic RICE references have been deleted and “For EN02” has been added to the beginning of the requirement. The applicable requirement did not change.
- 15) **Condition 7.1.6. (7.1.7. CP).** – The requirements of the table in subsection a. have been transferred as individual permit requirements under 7.1.6.a. and the table has been deleted from the renewal permit. The applicable requirements did not change.
- 16) **Condition 7.1.10. (7.1.11. CP).** – Similar to Item 10 above, the current permit has “orphaned” numbering. This condition has been “cleaned up” by removing the sub-level numbering. There were no changes to the applicable requirement.
- 17) **Condition 7.1.13. (7.1.14. CP).** – The table has been streamlined to only include the emission standards and to add “Subpart JJJJ Table 1” to the header.
- 18) **Appendix** – The requirements of the General Permit have been incorporated into section 6.0 of the renewal permit. Therefore, the Appendix has been deleted. (see Item 11 above)

### Non-Applicability Determinations

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

- a. **40 CFR Part 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.** The 1000 HP and 800 HP reciprocating engines with integral compressors (EN01 and EN02) were manufactured before July 11, 2005 and they are not compression ignition engines. Thus, these engines are not subject to 40 CFR Part 60 Subpart IIII. The 750 HP reciprocating engine with integral compressor (EN03) and emergency generators (EG01 and EG02) are not compression ignition engines as defined in 40 CFR §60.4219; therefore, these engines are not subject to 40 CFR Part 60 Subpart IIII.
- b. **40 CFR Part 60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.** The 1000 HP and 800 HP reciprocating engines with integral compressors (EN01 and EN02) were manufactured before July 12, 2006. Thus, these particular engines are not subject to 40 CFR Part 60 Subpart JJJJ.
- c. **40 CFR Part 63 Subpart HHH – National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities.** The Sardis Station is not subject to Subpart HHH since the station transports production gas to Hastings Extraction Plant, and it is also not a storage station. Additionally, Sardis Station is a minor (area) source of HAPs.
- d. **40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.** The reboiler (RBR02) is not subject to this subpart since it is exempt by §63.7491(h) as a boiler or process heater that is part of the affected source subject to another subpart of part 63 (i.e., Subpart HH). The definition of *Glycol dehydration unit* in §63.761 reads that the “[Rich] glycol is then regenerated in the glycol dehydration unit reboiler.” This implies that the reboiler is part of the glycol dehydration unit, and a TEG dehydration unit is the affected source specified in §63.760(b)(2) for area sources of HAP. Moreover, the facility is not a major source of HAPs. For these reasons, Subpart DDDDD does not apply to the reboiler RBR02.
- e. **40 CFR 63 Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources.** This subpart applies to an industrial, commercial, or institutional boiler as defined in §63.11237 that is located at, or is part of, an area source of hazardous air pollutants (HAP) according to §63.11193. The Sardis Station is an area source of HAPs and operates a reboiler RBR02. However, the reboiler RBR02 is not subject to this subpart since it is considered a *Process heater*, which is specifically excluded from the definition of *Boiler*, both of which are defined in 40 CFR §63.11237.
- f. **40 CFR Part 64 Compliance Assurance Monitoring (CAM).** The facility does not have any pollutant specific emissions units (PSEU) that satisfied all of the applicability criteria requirements of 40 CFR §64.2(a). There have been no changes to any equipment at the facility since the last renewal that have resulted in a source satisfying the applicability requirements of 40 CFR §64.2(a) and becoming subject to CAM.

### 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: May 11, 2022

Ending Date: June 10, 2022

### **Point of Contact**

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

Frederick Tipane  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
304/926-0499 ext. 41910  
frederick.tipane@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.