

Fact Sheet



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

Permit Number: **R30-10900019-2022**

Application Received: **July 9, 2021**

Plant Identification Number: **109-00019**

Permittee: **Eastern Gas Transmission and Storage, Inc.**

Facility Name: **Loup Creek Compressor Station**

Mailing Address: **925 White Oaks Blvd; Bridgeport, WV 26330**

Physical Location:	Kopperston, Wyoming County, West Virginia
UTM Coordinates:	449.31 km Easting • 4176.86 km Northing • Zone 17
Directions:	From I-77 at Harper Road, turn onto State Route 3 north for 10.4 miles. Turn onto Route 99 west for 14.3 miles. Turn left on Route 85 and travel 4 miles to Kopperston Grade School. Turn left on private road to Loup Creek Station.

Facility Description

Loup Creek Compressor Station is a natural gas production facility covered by Standard Industrial Classification (SIC) Code 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) natural gas fired reciprocating compressor engines, one (1) reciprocating emergency generator, one (1) dehydrator reboiler, one (1) dehydration unit with flare, and storage tanks of various sizes.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2020 Actual Emissions
Carbon Monoxide (CO)	72.60	21.98
Nitrogen Oxides (NO _x)	405.23	112.85
Particulate Matter (PM _{2.5})	3.75	0.29
Particulate Matter (PM ₁₀)	3.75	0.57
Total Particulate Matter (TSP)	5.13	0.57
Sulfur Dioxide (SO ₂)	0.08	0.02
Volatile Organic Compounds (VOC)	94.81	23.94
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2020 Actual Emissions
Acetaldehyde	1.07	0.19
Acrolein	0.95	0.18
Benzene	0.62	0.09
Ethylbenzene	0.99	0.00
Formaldehyde	7.35	0.93
Hexane	0.21	0.05
Toluene	0.78	0.09
Xylene	1.77	0.11
Total HAPs	13.74	1.64

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

Title V Program Applicability Basis

This facility has the potential to emit 405.23 TPY of NO_x. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, 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 Opacity requirements for boilers

	45CSR6	Open burning prohibited
	45CSR11	Standby plans for emergency episodes
	45CSR13	NSR Permitting
	45CSR16	New Stationary Sources Performance Standards
	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 HAPs
	40 CFR 60, Subpart JJJJ	NSPS for Spark Ignition Internal Combustion Engines
	40 CFR Part 61	Asbestos inspection and removal
	40 CFR 63, Subpart HH	Oil and Natural Gas Production Facilities NESHAP
	40 CFR 63, Subpart ZZZZ	MACT for Reciprocating Internal Combustion Engines
	40 CFR Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors
	45CSR17	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 (if any)
R13-2839C	9/23/2016	

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 fourth renewal. There have been no equipment changes at this facility since the issuance of R30-10900019-2017.

The following changes were made:

- Conditions 7.4.2.b(2) and (3) were removed because this section of 40 CFR §60.4243(d) has been vacated.
- Condition 7.4.4 was updated.
- The reporting requirements of 40 C.F.R. §§60.4245(d) and (e) have been included in condition 7.6.1.
- Conditions 5.1.15 and 5.2.4 from the previous Title V permit were not included in this permit per the company's request. 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 SO₂ is less than 500 lbs/year. Loup Creek Compressor station is exempt from 45CSR§10-4.1; reported facility-wide PTE of SO₂ is 167 lbs/year.

- Conditions 5.1.14 and 5.2.5 from the previous Title V permit were not included in this permit per the company's request. Pipeline-quality natural gas cannot contain more than 20 grains total sulfur per 100 cubic feet of gas, which is much less than 50 grains H₂S per 100 cubic feet of gas. Therefore, Loup Creek Compressor station is not subject to 45CSR§10-5.1.

Non-Applicability Determinations

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

45 CSR 10 – Compressor engines (EN01 – EN04) have been excluded from the applicability of SO₂ and H₂S limits. WVDAQ determined that 45 CSR 10 is not applicable to compressor engines. The dehydrator and flare (DEHY01 and F1) are not subject to the SO₂ concentration limit of 45CSR§10-4.1 since the facility's SO₂ PTE is less than the 500 lbs/year specified in 45CSR§10-4.1.e which exempts sources from the SO₂ concentration limit. The dehydrator and flare do not combust a process gas stream that contains an H₂S concentration greater than 50 grains per 100 cubic feet since pipeline quality natural gas cannot contain more than 20 grains per 100 cubic feet so the H₂S concentration limit of 45CSR§10-5.1 does not apply.

40 CFR 60 Subpart JJJJ – The compressor engines (EN01 – EN03) are not subject to this subpart since they were manufactured in 1977, before the applicability date.

40 CFR 60 Subpart OOOO – This subpart does not apply to the facility since the facility is a gathering facility that does not have gas wells, centrifugal compressors, reciprocating compressors, and/or pneumatic controllers constructed, modified, or reconstructed after August 23, 2011, and on or before September 18, 2015. Tanks TK11, TK12, and TK13, installed between these applicability dates, do not meet the applicability requirements in 40 CFR § 60.5365(e).

40 CFR 63 Subpart HHH – This subpart does not apply to the facility since the facility is not a transmission or storage station and is not a major source of HAPs.

40 CFR 63 Subpart DDDDD – The reboiler (RBR02) is not subject to this subpart since the facility is not a major source of HAPs.

40 CFR 63 Subpart JJJJJ – The reboiler (RBR02) is not subject to this subpart since it is considered a “process heater,” which is excluded from the definition of “boiler”.

40 CFR 64 – There have been no changes in this permit since the previous renewal was issued, so CAM remains not applicable to any emission unit 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: March 8, 2022

Ending Date: April 7, 2022

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. 41283

Beena.j.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.