### West Virginia Department of Environmental Protection Division of Air Quality

## **Fact Sheet**



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

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on June 01, 2020.

Permit Number: R30-03900670-2020 Application Received: January 02, 2024 Plant Identification Number: 03-54-03900670 Permittee: Columbia Gas Transmission, LLC Facility Name: Elk River Compressor Station

Mailing Address: 1700 MacCorkle Avenue SE, Charleston, WV 25314

Permit Action Number: MM01 Revised: June 4, 2024

Physical Location: Clendenin, Kanawha County, West Virginia

UTM Coordinates: 472.0 km Easting • 4,259.9 km Northing • Zone 17

Directions: From Charleston, travel north on I-79 to Exit 19. Take Exit 19 and take

US 119 South to Clendenin. In Clendenin, turn onto State Route 4 East for approximately 1.5 miles. The compressor station is on the right.

#### **Facility Description**

The Elk River Compressor Station increases the pressure of the incoming natural gas. The facility has three compressors to increase the pressure of the natural gas. The compressors are powered by three 15,600-HP Solar Mars 100 turbines. The turbines are equipped with advanced dry-low-NO<sub>X</sub> combustion controls from SoLoNO<sub>X</sub>. Other emission units at the facility include two process heaters; forty-nine catalytic heaters ranging from 0.005 mmBTU/hr to 0.072 mmBTU/hr; a 1,000-gallon wastewater storage tank; and a 10,000-gallon pipeline liquids tank. The facility is equipped with an 880-HP four-stroke lean-burn Waukesha VGF-L36GL natural gas-fired reciprocating internal combustion engine (RICE) to power an emergency generator. (SIC: 4922, NAICS: 486210)

This minor modification incorporates the revisions made with the Class II Administrative Update Permit R13-3294B. The revisions include increasing the permitted operating hours of the emergency generator (Emission Unit ID: G1) as well as other administrative changes.

#### **Emissions Summary**

This minor modification resulted in the following changes in potential emissions:

Change in Facility-Wide Potential Emissions (tpy)		
Regulated Pollutant	Change in Potential Emissions	
Nitrogen Oxides (NO <sub>X</sub> )	+ 0.78	
Carbon Monoxide (CO)	+ 0.47	
Volatile Organic Compounds (VOC)	+ 0.10	
Particulate Matter – 10 (PM <sub>10</sub> )	+ 0.01	
Sulfur Dioxide (SO <sub>2</sub> )	+ < 0.01	
Hazardous Air Pollutants (HAP)	+ 0.10	

#### Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 243.66 tpy of carbon monoxide. 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.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR13	NSR Permit Requirements.
	45CSR16	Standards of Performance for New
		Stationary Sources.
	45CSR30	Operating Permit Requirements.
	40 C.F.R. Part 60 Subpart OOOOa	Standards of Performance for Crude Oil
		and Natural Gas Facilities for Which
		Construction, Modification, or
		Reconstruction Commenced After
		September 18, 2015 and On or Before
		December 6, 2022.

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**

The active permits/consent orders affected by this modification are as follows:

Permit or	Date of
Consent Order Number	Issuance
R13-3294B	February 23, 2024

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 minor modification incorporates the revisions made with the Class II Administrative Update R13-3294B. The revisions include increasing the permitted operating hours of the emergency generator (Emission Unit ID: G1) as well as other administrative changes.

The following changes have been made to the Title V operating permit for this modification:

- 1. The UTM Coordinates have been revised to 472.0 km Easting.
- 2. Section 1.0. Emission Units and Active R13, R14, and R19 Permits
  - a. The Emission Units Table in Section 1.1. has been updated as follows:
    - i. In the description of the emergency generator G1, "Engine" has been replaced with "RICE".
    - ii. The installation year of all the equipment listed in the table has been updated to 2018.
    - iii. The design capacity of the 49 catalytic heaters has been revised to the total maximum design heat input of 2.404 mmBTU/hr.
  - b. The table of active R13, R14, and R19 permits has been updated with R13-3294B which was issued on February 23, 2024.
- 3. Section 2.0. General Conditions
  - a. In Condition 2.1.3., the reference to 45CSR§30-2.12. has been replaced with 45CSR§30-2.39 which defines "Secretary".
  - b. The authority of Condition 2.11.4. has been updated to 45CSR§30-2.40. due to a change in 45CSR30.
  - c. Section 2.17., which previously contained emergency requirements, has been removed from the permit and replaced with "Reserved" as the requirements for emergencies and affirmative defense were removed from 45CSR30.
  - d. 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 3.0. Facility-Wide Requirements
  - a. Condition 3.5.3. has been updated to show changes that have been made to the U.S. EPA designee/address.

- b. 45CSR§30-8 has been revised and no longer requires the submission of certified emissions statements. Condition 3.5.4. has been updated accordingly.
- c. The requirements of Conditions 3.5.7. and 3.5.8.a.1. have been removed from the operating permit, and the conditions have been marked as "Reserved." due to the removal of the sections of 45CSR30 that related to emergencies and affirmative defense.
- d. Due to revisions in 45CSR§30-5.1.c.3.C.2., "telefax" has been updated to "email" in Condition 3.5.8.a.2.

#### 5. Section 5.0. – Emergency Generator RICE

- a. Throughout Section 5.0., "RICE" has been added as a description of the emergency generator G1.
- b. In Condition 5.1.1., the limitation for the maximum yearly operating hours of the emergency generator G1 has been increased to 500 hours per year during periods of non-emergencies.
- c. In Condition 5.1.2., the maximum annual emissions of nitrogen oxides, carbon monoxide, and volatile organic compounds from the emergency generator have been updated to account for the increase in the maximum yearly operating hours.

#### 6. Section 6.0. – Heaters

a. Section 6.0. of the operating permit contains the requirements that are applicable to the process heaters (HTR1, HTR2) and the catalytic heaters (HTR3). Because 45CSR2 applies to indirect heat exchangers and the catalytic heaters are not indirect heat exchangers, Conditions 6.1.2. and 6.3.1. have been updated to specify that the visible emission requirements of 45CSR§§2-3.1. and -3.2. are applicable to the process heaters HTR1 and HTR2.

#### 7. Section 7.0. – 40CFR60, Subpart OOOOa Requirements

- a. Per 40 C.F.R. §60.5365a(j), the Elk River Compressor Station is subject to the Subpart OOOOa provisions for fugitive emissions components located at a compressor station. Subpart OOOOa has been amended since R30-03900670-2020 was issued on June 1, 2020. The most recent amendments to Subpart OOOOa (publication date: March 8, 2024, effective date: May 7, 2024) established new standards of performance for methane and VOC emissions and aligned the 2016 NSPS Subpart OOOOa methane standards with the previously modified 2020 NSPS Subpart OOOOa VOC standards.
- b. Due to the amendments to Subpart OOOOa, the following requirements have been updated in Section 7.0. of the operating permit:
  - i. In lieu of complying with the Subpart OOOOa requirements for fugitive emissions components, the permittee may comply with the standards of §60.5398b and the notification, recordkeeping, and reporting requirements of §60.5424b.
  - ii. If Method 21 of 40 C.F.R. Part 60, Appendix A-7 is used to determine fugitive emissions, the permittee's monitoring plan must include the procedures of calibration in §60.5397a(c)(8)(iii). These requirements have been added to the operating permit under paragraph c.8.iii. of Condition 7.1.1.
  - iii. §60.5397a(d), which contains the elements that must be included in the fugitive emissions monitoring plan, has been revised. Condition 7.1.1.d. has been updated accordingly.

- iv. In accordance with §60.5397a(f), an initial monitoring survey must be conducted within 90 days of the startup of production of a new compressor station or within 90 days of the modification of a collection of fugitive components at a compressor station.
- v. Condition 7.1.1.h. contains the \$60.5397a(h) requirements for the repair of identified sources of fugitive emissions. The requirements for the timeline in which repairs must be completed, for the replacement of a fugitive emissions component, and to resurvey a fugitive emissions component to verify the repair have been updated in accordance with the Subpart OOOOa amendments.
- vi. The \$60.5420a(c)(15) recordkeeping requirements in Condition 7.4.1. and the \$60.5420a(b)(7) reporting requirements in Condition 7.5.1. have been revised.
- vii. Other minor revisions, such as updating references to requirements, have been made throughout Section 7.0. in accordance with the Subpart OOOOa amendments.

#### **Non-Applicability Determinations**

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

Not Applicable.

#### **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: Not Applicable. Ending Date: Not Applicable.

#### **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 57<sup>th</sup> Street SE
Charleston, WV 25304
304/414-1915
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#### **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.