

# Fact Sheet



## *For Draft/Proposed Permitting Action Under 45CSR30 and Title V of the Clean Air Act*

Permit Number: **R30-05100261-2025**  
Application Received: **February 2, 2024**  
Plant Identification Number: **03-54-051-00261**  
Permittee: **Appalachia Midstream Services, L.L.C.**  
Facility Name: **Ridgeline Compressor Station**  
Mailing Address: **100 Teletech Drive, Suite 2, Moundsville, WV 26041**

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Physical Location: Cameron, Marshall County, West Virginia  
UTM Coordinates: 537.78 km Easting • 4,403.01 km Northing • Zone 17  
Directions: From Cameron, head Southeast on US-250/Maple Avenue for approximately 5.1 miles. The compressor station is located on the left.

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### **Facility Description**

The Ridgeline Compressor Station receives natural gas from local production wells then compresses and dehydrates the gas for delivery to a gathering pipeline. Condensate is removed from the gas and pumped off-site; there is no on-site storage of condensate liquids. The facility operates four 5,000-HP compressor engines; one 11,252-HP compressor turbine; one 1,468-HP generator engine; one 250-mmscfd dehydration unit and one 160-mmscfd dehydration unit (each comprised of a flash tank, still vent, and reboiler); four 400-bbl produced water storage tanks; other various storage tanks; and truck load out.

SIC: 1389, NAICS: 213112

**Emissions Summary**

<b>Plantwide Emissions Summary [Tons per Year]</b>		
<b>Regulated Pollutants</b>	<b>Potential Emissions</b>	<b>2023 Actual Emissions</b>
Carbon Monoxide (CO)	112.26	27.46
Nitrogen Oxides (NO <sub>x</sub> )	115.84	82.76
Particulate Matter (PM <sub>2.5</sub> )	11.27	9.35
Particulate Matter (PM <sub>10</sub> )	11.27	9.35
Total Particulate Matter (TSP)	11.27	9.35
Sulfur Dioxide (SO <sub>2</sub> )	1.64	1.28
Volatile Organic Compounds (VOC)	102.23	30.85

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

<b>Hazardous Air Pollutants</b>	<b>Potential Emissions</b>	<b>2023 Actual Emissions</b>
Acetaldehyde	2.54	2.16
Acrolein	1.56	1.33
Benzene	0.43	None Reported
1,3-Butadiene	0.08	None Reported
Ethylbenzene	0.47	None Reported
Formaldehyde	9.19	1.15
n-Hexane	2.61	0.38
Methanol	0.95	0.72
Polycyclic Organic Matter (POM/PAH)	0.12	None Reported
Toluene	1.17	0.05
2,2,4-Trimethylpentane	0.21	None Reported
Xylenes	2.18	0.22
Other/Trace HAP	0.11	None Reported
Total HAPs	21.62	6.01

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

### **Title V Program Applicability Basis**

This facility has the potential to emit 112.26 tpy of Carbon Monoxide, 115.84 tpy of Nitrogen Oxides, and 102.23 tpy of Volatile Organic Compounds. Due to this facility's potential to emit over 100 tons per year of criteria pollutants, Appalachia Midstream Services, L.L.C. 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	Control of Particulate Matter Air Pollution from the Combustion of Fuel in Indirect Heat Exchangers.
	45CSR6	Control of Air Pollution from Combustion of Refuse.
	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, Permission to Commence Construction, and Procedures for Evaluation.
	45CSR16	Standards of Performance for New Stationary Sources.
	WV Code § 22-5-4 (a) (15)	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 KKKK	Standards of Performance for Stationary Combustion Turbines.
	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.
	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
R13-3561	July 29, 2022

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**

Appalachia Midstream Services, L.L.C.'s Ridgeline Compressor Station is an existing facility that was initially permitted under the General Permit G35-D137 and later modified under G35-D137A. The general permit has been superseded by the NSR Permit R13-3561. With the issuance of the Modification Permit R13-3561, the facility became subject to Title V due to a potential to emit over 100 tpy of carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), and volatile organic compounds (VOCs).

The Emission Units Table of Section 1.0. includes one lube oil storage tank (TK-05), one used oil storage tank (TK-06), one coolant storage tank (TK-07), one used coolant storage tank (TK-08), five hydrate inhibitor storage tanks (TK-09 to -13), four engine oil storage tanks (TK-14 to -17), four compressor oil storage tanks (TK-18 to -21), two TEG storage tanks (TK-22 and -23), and one defoamer storage tank (TK-24). These tanks have negligible emissions of VOCs and HAPs. None of the tanks are currently subject to any applicable requirements under this operating permit.

This section outlines the applicable requirements that have been included in the initial Title V operating permit.

**Section 3.0. – Facility-Wide Requirements**

The following conditions were added to Section 3.0.:

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3561 Condition
3.1.9.	Facility-wide HAP emissions are limited to ensure the facility remains a minor source of HAPs.	45CSR13	4.1.2.
3.1.10.	Operation and Maintenance of Air Pollution Control Equipment.	45CSR13	4.1.3., 7.1.7., and 11.1.6.

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3561 Condition
3.1.11.	Only the permitted emission units and <i>de minimis</i> sources are authorized at the facility.	45CSR13	4.1.5.
3.1.12.	Fugitive particulate matter may not be discharged beyond the boundary lines of the facility.	45CSR§17-3.1.	N/A
3.4.1.	Record of Monitoring Information.	45CSR13 45CSR§30-5.1.c.2.A.	4.1.1.
3.4.2.	Retention of Records.	45CSR13 45CSR§30-5.1.c.2.B.	3.4.1.
3.4.4.	Record of Malfunctions of Air Pollution Control Equipment.	45CSR13	4.1.4.
3.7.2.	Permit Shield. This condition contains the standards that are currently inapplicable to the facility and for which the permittee requested a permit shield. These determinations have also been included in the Non-Applicability Determinations section of this Fact Sheet.	45CSR§30-5.6.	N/A

**Section 4.0. – Compressor Engines and Generator Engine [Emission Point IDs: 1E to 4E and 8E]**

The Ridgeline Compressor Station operates four spark ignition (SI) reciprocating internal combustion engines (RICEs) (Emission Units: CE-01 to CE-04; Emission Point IDs: 1E to 4E). These engines are used to drive the natural gas reciprocating compressors. The RICEs are Caterpillar G3616LE-A4 engines, and each has a maximum power rating of 5,000 HP. The compressor engines are fueled by natural gas. An oxidation catalyst (OxCat-01 to OxCat-04) is operated with each compressor engine to control emissions of carbon monoxide (CO) with a control efficiency of 89.0%, emissions of volatile organic compounds (VOCs) with a control efficiency of 65.1%, and emissions of formaldehyde with a control efficiency of 80.0%.

A generator engine (Emission Unit: GE-01; Emission Point ID: 8E) is also operated at the facility. This generator engine is used to provide electrical power to the facility. The generator is a Caterpillar G3512LE which is a SI RICE with a maximum power rating of 1,468 HP. The generator is fueled by natural gas. An oxidation catalyst (OxCat-05) is operated with the generator to control emissions of CO with a control efficiency of 87.0%, emissions of VOCs with a control efficiency of 49.5%, and emissions of formaldehyde with a control efficiency of 83.3%.

The RICEs are subject to the following regulations:

1. **45CSR13** – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, Permission to Commence Construction, and Procedures for Evaluation*
2. **45CSR16** – *Standards of Performance for New Stationary Sources*
3. **40 C.F.R. Part 60 Subpart JJJJ** – *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*

Construction of the engines CE-01 to CE-04 and GE-01 commenced after June 12, 2006; the manufacture date of each engine is after July 1, 2007; and each engine is a SI ICE with a maximum engine power greater

than 1,350 HP. Therefore, the compressor engines and the generator engine are subject to Subpart JJJJ per 40 C.F.R. §§60.4230(a)(4) and (a)(4)(i).

CE-01 to CE-04 and GE-01 are non-emergency, 4-stroke lean burn (4SLB) engines with a maximum engine power greater than 100 HP. Therefore, the engines are subject to the emission standards for NO<sub>x</sub>, CO, and VOCs per 40 C.F.R. §60.4233(e). The engines are non-certified under Subpart JJJJ. As the engines CE-01 to CE-04 and GE-01 are non-certified under Subpart JJJJ, compliance with the emission standards is demonstrated through periodic performance tests as specified in §60.4244 as well as the reporting and recordkeeping requirements of §60.4245.

4. **45CSR34** – *Emission Standards for Hazardous Air Pollutants*
5. **40 C.F.R. Part 63 Subpart ZZZZ** – *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Combustion Engines*

According to 40 C.F.R. §63.6590(a)(2)(iii), CE-01 to CE-04 and GE-01 are considered new stationary RICEs as the engines are located at an area source of HAPs and construction of the engines commenced after June 12, 2006. As new stationary RICEs located at an area source of HAPs, these engines demonstrate compliance with the requirements of Subpart ZZZZ through compliance with the requirements of Part 60 Subpart JJJJ per 40 C.F.R. §§63.6590(c) and (c)(1).

The table below describes each condition added to Section 4.0. of the Title V operating permit:

<b>Title V Permit Condition</b>	<b>Summary of Permit Condition</b>	<b>Regulatory Citation</b>	<b>R13-3561 Condition</b>
4.1.1.	Emission limitations for NO <sub>x</sub> , CO, VOCs, and Formaldehyde from the compressor engines CE-01 to CE-04.	45CSR13	5.1.1.
4.1.2.	Emission limitations for NO <sub>x</sub> , CO, and VOCs from the generator engine GE-01.	45CSR13	5.1.2.
4.1.3.	The emission limitations in Conditions 4.1.1. and 4.1.2. apply at all times, except during periods of start-up and shutdown. The engines must be operated in a manner consistent with good air pollution control practices for minimizing emissions at all times.	45CSR13	5.1.3.
4.1.4.	Requirements for the use of the catalytic reduction devices (OxCat-01 to OxCat-05). NOTE: The generator engine GE-01 is a lean-burn natural gas engine equipped with an oxidation catalyst control device (OxCat-05) and must be fitted with a closed-loop automatic air-to-fuel ratio feedback controller in accordance with paragraph a. of this condition. Therefore, a reference to the emission limits of GE-01 in Condition 4.1.2. was added to paragraph a.	45CSR13	5.1.4.
4.1.5.	Applicability of 40 C.F.R. Part 60 Subpart JJJJ to the engines CE-01 to CE-04 and GE-01.	45CSR13 45CSR16 40 C.F.R. §§60.4230(a), (a)(4), and (a)(4)(i)	12.1.1.

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3561 Condition
4.1.6.	Emission standards for NO <sub>x</sub> , CO, and VOCs from Table 1 to Subpart JJJJ of Part 60 that are applicable to CE-01 to CE-04 and GE-01.	45CSR13 45CSR16 40 C.F.R. §60.4233(e) Table 1 to Subpart JJJJ of Part 60	12.1.2.
4.1.7.	CE-01 to CE-04 and GE-01 must be operated and maintained to achieve the emissions standards of 40 C.F.R. §60.4233(e) over the entire life of each engine.	45CSR13 45CSR16 40 C.F.R. §60.4234	12.1.3.
4.1.8.	Deadline for installing stationary ICE with a maximum engine power over 500 HP that do not meet the applicable requirements of 40 C.F.R. §60.4233.	45CSR13 45CSR16 40 C.F.R. §60.4236(b)	12.2.1.
4.1.9.	The requirements of 40 C.F.R. §60.4236 do not apply to engines that are modified, reconstructed, or reinstalled at a new location.	45CSR13 45CSR16 40 C.F.R. §60.4236(e)	12.2.2.
4.1.10.	Propane may be used as an alternative fuel during emergency operations for up to 100 hours.	45CSR16 40 C.F.R. §60.4243(e)	N/A
4.1.11.	An air-to-fuel ratio controller must be used with the operation of three-way catalysts/non-selective catalytic reduction.	45CSR16 40 C.F.R. §60.4243(g)	N/A
4.1.12.	For a new or reconstructed RICE located at an area source, compliance with 40 C.F.R. Part 63 Subpart ZZZZ must be demonstrated upon startup.  NOTE: The NSR permit condition contains the date by which an existing RICE at an area source of HAPs must be in compliance with the applicable provisions of Subpart ZZZZ, per §63.6595(a)(1). This requirement is inapplicable to the engines at the compressor station which are considered new RICES at an area source under Subpart ZZZZ and, therefore, has been replaced with the requirement described above.	45CSR13 45CSR34 40 C.F.R. §63.6595(a)(7)	15.1.1.
4.1.13.	For the engines CE-01 to CE-04 and GE-01, compliance with 40 C.F.R. Part 63 Subpart ZZZZ is demonstrated through compliance with 40 C.F.R. Part 60 Subpart JJJJ.	45CSR13 45CSR34 40 C.F.R. §§63.6590(c) and (c)(1)	15.1.2.
4.2.1.	Monitoring requirements for catalytic oxidizer control devices (OxCat-01 to OxCat-05).	45CSR13	5.2.1.
4.2.2.	Requirements for non-certified engines under Subpart JJJJ to demonstrate compliance with the emission standards of 40 C.F.R. §60.4233(e).  A performance test of each engine must be completed every 8,760 hours or 3 years, whichever comes first.	45CSR13 45CSR16 40 C.F.R. §§60.4243(b), (b)(2), and (b)(2)(ii)	12.3.1.

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3561 Condition
4.3.1.	<p>Procedures for performance tests under Subpart JJJJ.</p> <p>NOTE: In R13-3561, Condition 5.3.1. specifies that this requirement will demonstrate compliance with Condition 5.1.1. which contains the emission limits established under the NSR permit for the compressor engines CE-01 to CE-04, and Condition 12.4.1. specifies that this requirement will demonstrate compliance with Condition 12.3.1.b.i. which contains the requirements of §60.4243(b)(2)(ii). As the compressor engines CE-01 to CE-04 and the generator engine GE-01 are subject to the emission standards of §60.4233(e) and to the performance testing requirements of §60.4243(b)(2)(ii), this requirement has been updated in the operating permit to include a reference to Condition 4.1.6. which contains the standards of §60.4233(e) and to Condition 4.1.2. which contains the NO<sub>x</sub>, CO, and VOC emission limits established under the NSR permit for GE-01.</p>	<p>45CSR13                      45CSR16                      40 C.F.R. §60.4244</p>	<p>5.3.1. and                      12.4.1.</p>
4.4.1.	<p>Maintain records of the maintenance performed on each engine to demonstrate compliance with the requirements for the use of catalytic reduction devices in Condition 4.1.4.</p> <p>NOTE: In R13-3561, Condition 5.4.1. states that maintaining records of maintenance performed on each engine will demonstrate compliance with the emission limitations for the generator engine (GE-01) in Condition 5.1.2. However, in addition to containing maintenance requirements for each of the engines at the facility, the requirements for the use of catalytic reduction devices in Condition 5.1.4.a. and c. of R13-3561 are derived from Condition 12.1.3. of the General Permit G35-E with which a registrant demonstrates compliance by maintaining records of maintenance performed on each RICE/generator (Condition 12.3.1.). Therefore, this reference has been corrected in the operating permit to the requirements for the use of catalytic reduction devices in Condition 4.1.4.</p>	<p>45CSR13</p>	<p>5.4.1.</p>
4.4.2.	<p>Maintain records of the maintenance performed on each catalytic reduction device to demonstrate compliance with the catalytic reduction device requirements in Condition 4.2.1.</p>	<p>45CSR13</p>	<p>5.4.2.</p>
4.4.3.	<p>Maintain a copy of the site-specific maintenance plan or the manufacturer maintenance plan.</p>	<p>45CSR13</p>	<p>5.4.3.</p>
4.4.4.	<p>Maintain the records required in Conditions 4.4.1. through 4.4.3. in accordance with the requirements for the Retention of Records in Condition 3.4.2. of the operating permit.</p> <p>NOTE: In R13-3561, Condition 5.4.4. states records must be maintained in accordance with Condition 3.5.1. which contains the reporting requirements for the responsible official. In the Title V permit, this has been corrected to require that records must be maintained according to the requirements for the retention of records (Condition 3.4.2. of the Title V permit; Condition 3.4.1. of R13-3561).</p>	<p>45CSR13</p>	<p>5.4.4.</p>



Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3561 Condition
4.4.5.	Recordkeeping requirements from 40 C.F.R. Part 60 Subpart JJJJ that are applicable to uncertified engines.	45CSR13 45CSR16 40 C.F.R. §§60.4245(a), (a)(1), (a)(2), and (a)(4)	12.5.1.a.
4.5.1.	40 C.F.R. Part 60 Subpart JJJJ reporting requirements.	45CSR13 45CSR16 40 C.F.R. §§60.4245(d), (f), and (g)	12.5.1.d.

NOTE: The following conditions of R13-3561 have not been included in this operating permit.

1. Condition 12.1.1.b. contains the applicability requirement of 40 C.F.R. §60.4230(a)(5) and applies to stationary SI ICEs that were modified or reconstructed after June 12, 2006. However, as construction of the engines CE-01 to CE-04 and GE-01 commenced after June 12, 2006, this requirement has not been included in the operating permit.
2. Condition 12.5.1.c. contains the requirements of 40 C.F.R. §60.4245(c) which required the permittee to submit an initial notification of construction as required under 40 C.F.R. §60.7(a)(1). The DAQ received the notification that construction of the compressor engines CE-01 to CE-04 had commenced on January 7, 2020 and that construction of the generator engine GE-01 had commenced on November 16, 2021.

**Section 5.0. – Turbine [Emission Point IDs: 9E and 10E]**

The Ridgeline Compressor Station operates a Solar Taurus 70-10802S stationary combustion turbine (Emission Unit: CT-01; Emission Point ID: 9E) to drive a natural gas centrifugal compressor. The turbine is fueled by natural gas, has a site rating of 11,252 HP, and a maximum throughput of 83.87 mmBTU/hr. The number of turbine start and stop events (Emission Unit: TSS; Emission Point ID: 10E) is limited to 104 events per year based on a twelve-month rolling total.

The turbine is equipped with a SoLoNO<sub>x</sub> combustion system which reduces emissions of nitrogen oxides and carbon monoxide. The turbine is operated in SoLoNO<sub>x</sub> mode during normal operations, except for short periods of time during start-up and shutdown of the turbine. Emissions from the turbine are vented directly to the atmosphere.

The turbine CT-01 is subject to the following regulations:

1. **45CSR13** – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, Permission to Commence Construction, and Procedures for Evaluation*
2. **45CSR16** – *Standards of Performance for New Stationary Sources*
3. **40 C.F.R. Part 60 Subpart KKKK** – *Standards of Performance for Stationary Combustion Turbines*

Subpart KKKK establishes emission standards for the control of nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) from stationary combustion turbines. Construction of the turbine began after February 18, 2005, and the turbine has a heat input at peak load equal to or greater than 10.7 gigajoules (10 mmBTU) per hour, based on the higher heating value of the fuel. Therefore, per 40 C.F.R. §60.4305(a), CT-01 is subject to Subpart KKKK.

The turbine is natural gas-fired and has a heat input at peak load of greater than 50 mmBTU/hr and less than 850 mmBTU/hr. Thus, the turbine is subject to the NO<sub>x</sub> emission standard of 25 ppm at 15% O<sub>2</sub> as well as the alternative NO<sub>x</sub> emission standard of 150 ppm at 15% O<sub>2</sub> when operating at less than 75% of peak load or at temperatures below 0°F, in accordance with §60.4230(a) and Table 1 to Subpart KKKK. Under R13-3561, the turbine is required to meet a more stringent NO<sub>x</sub> emission standard of 15 ppm at 15% O<sub>2</sub> when operating at or above 75% peak load or at temperatures at or above 0°F. Compliance with the NO<sub>x</sub> emission standards is demonstrated through annual performance testing as specified in §60.4340(a) and §60.4400. A written report of the results of the testing must be submitted per §60.4375(b).

Per 40 C.F.R. §60.4330(a)(2), the fuel used in the turbine must not have total potential sulfur emissions in excess of 0.060 lbs SO<sub>2</sub>/mmBTU. Under R13-3561, the turbine is required to meet a more stringent SO<sub>2</sub> emission standard of 0.003 lbs of SO<sub>2</sub>/mmBTU. Compliance with the limits will be demonstrated by maintaining documentation that the natural gas used to fuel the turbine has a maximum total sulfur content of 20 grains of sulfur or less per 100 cubic feet of natural gas.

The table below describes each condition added to Section 5.0. of the Title V operating permit:

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3561 Condition
5.1.1.	The turbine shall be operated and maintained in accordance with the manufacturer’s recommendations and specifications. The turbine shall only burn natural gas.	45CSR13	6.1.1.
5.1.2.	Paragraph a. contains the limitations for nitrogen oxide (NO <sub>x</sub> ), carbon monoxide (CO), sulfur dioxide (SO <sub>2</sub> ), and volatile organic compound (VOC) emissions from the turbine as established in R13-3561 and/or Table 1 to Subpart KKKK of Part 60. Paragraph b. requires the permittee to operate and maintain the turbine, any air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices.	45CSR13 45CSR16 40 C.F.R. §§60.4320(a), 60.4330(a)(2), 60.4333(a), and 60.4365(a) Table 1 to Subpart KKKK of Part 60	6.1.2. and 6.1.3.
5.1.3.	Annual limit for the number of turbine start and stop events.	45CSR13	6.1.4.
5.2.1.	Compliance with the emission limitations in Condition 5.1.2. is demonstrated by monitoring and recording the number of hours and conditions during which the turbine is operated.	45CSR13	6.2.1.
5.3.1.	To demonstrate compliance with the NO <sub>x</sub> emission standard, the permittee must conduct annual performance testing of the turbine. On October 6, 2023, the DAQ received the results for the initial performance test which was conducted on August 31, 2023. Therefore, the requirements to conduct an initial performance test under §60.8(a) and §60.4400(a) were not included in the operating permit.	45CSR13 45CSR16 40 C.F.R. §§60.4340(a) 60.4400	6.3.1.

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3561 Condition
5.3.2.	Subpart KKKK requirements for performance testing of NO <sub>x</sub> emissions from the turbine.	45CSR13 45CSR16 40 C.F.R. §60.4400	6.3.1.
5.4.1.	Maintain records of the amount of natural gas consumed and the hours of operation of the turbine to demonstrate compliance with the emission limits in Condition 5.1.2.	45CSR13	6.4.1.
5.4.2.	The permittee must maintain current and valid documentation that the natural gas consumed by the turbine has a maximum total sulfur content of 20 grains of sulfur or less per 100 cubic feet of natural gas.	4CSR13 45CSR16 40 C.F.R. §60.4365(a)	6.4.2.
5.4.3.	Compliance with the emission limitations of Condition 5.1.2. must be demonstrated by monitoring and recording the monthly operating hours for each parameter listed in Condition 5.2.1. and calculating the monthly emissions for each pollutant.  NOTE: In Condition 6.4.3. of R13-3561, the numbers of the referenced requirements (the emission limitations in Condition 6.1.2. and the monitoring for hours of operation in Condition 6.2.1.) were transposed. These references were corrected in the operating permit.	45CSR13	6.4.3.
5.5.1.	The permittee must submit a report with the results of the performance testing required in condition 5.3.1. of the operating permit.  NOTE: In R13-3561, Condition 6.5.2. includes a reference to the requirements of Section 6.2. This appears to be a typo and was corrected in the operating permit to reference the Section 5.3. testing requirements.	45CSR13 45CSR16 40 C.F.R. §60.4375(b)	6.5.2.

NOTE: Condition 6.5.1. of R13-3561 contains the general provision of 40 C.F.R. §60.7(a)(3) which requires the permittee to submit a notification of the actual date of the initial startup of the turbine. The DAQ received this notification on March 16, 2023. Therefore, this requirement has not been included in the operating permit.

### Sections 6.0. and 7.0. – 40 C.F.R. Part 60 Subpart OOOOa Requirements

Sections 6.0. and 7.0. contain the applicable requirements of 40 C.F.R. Part 60 Subpart OOOOa. Subpart OOOOa contains the standards for the control of VOC, SO<sub>2</sub>, and Greenhouse Gas (GHG) emissions from affected facilities in the crude oil and natural gas source category that commenced construction after September 18, 2015, and on or before December 6, 2022.

At the Ridgeline Compressor Station, the potential affected facilities constructed within the applicability dates of Subpart OOOOa include centrifugal compressors (§60.5365a(b)), reciprocating compressors (§60.5365a(c)), pneumatic controllers (§60.5365a(d)), storage vessels (§60.5365a(e)), and the fugitive emissions components (§60.5365a(j)).

1. A centrifugal compressor affected facility under Subpart OOOOa is a single centrifugal compressor using wet seals. The centrifugal compressor driven by the turbine CT-01 uses dry gas seals and, therefore, is not subject to the Subpart OOOOa requirements for centrifugal compressors.
2. The five reciprocating compressors which are operated at the Ridgeline Compressor Station were constructed within the applicability dates of Subpart OOOOa and, therefore, are subject to the requirements of Subpart OOOOa. Four of the compressors are driven by the natural gas-fired engines CE-01 to CE-04 to compress the incoming natural gas. The fifth reciprocating compressor is an electrically driven compressor associated with the turbine’s dry gas seal recompression system. The requirements applicable to the reciprocating compressors have been included in Section 6.0. of this operating permit.
3. A pneumatic controller that is not located at a natural gas processing plant is considered an affected facility under Subpart OOOOa only if the unit is natural gas-driven and operates at a natural gas bleed rate greater than 6 scfh. The pneumatic controllers located at the Ridgeline Compressor Station are either compressed air-driven or operate at a natural gas bleed rate less than or equal to 6 scfh. Therefore, the Ridgeline Compressor Station is not subject to the standards for pneumatic controllers under Subpart OOOOa.
4. A single storage vessel which commenced construction, reconstruction, or modification after November 16, 2020 is an affected facility under Subpart OOOOa if the storage vessel has potential VOC emissions equal to or greater than 6 tpy as determined according to §60.5365a(e)(2). Each of the produced water storage tanks (TK-01 to TK-04) located at the Ridgeline Compressor Station have potential VOC emissions less than 6 tpy and, therefore, are not subject to the Subpart OOOOa requirements for storage vessels.
5. As the compressors were installed within the applicability dates of Subpart OOOOa, the standards for the collection of fugitive emissions components at a compressor station are applicable to the Ridgeline Compressor Station. The applicable requirements have been included in Section 7.0. of the operating permit.

**Section 6.0. – Subpart OOOOa Requirements for the Reciprocating Compressors associated with CE-01 to CE-04 and CT-01**

The four reciprocating compressors associated with the engines CE-01 to CE-04 and the reciprocating compressor associated with the turbine CT-01’s dry gas seal recompression system are subject to the following regulations:

1. **45CSR13** – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, Permission to Commence Construction, and Procedures for Evaluation*
2. **45CSR16** – *Standards of Performance for New Stationary Sources*
3. **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*

The table below describes each condition added to Section 6.0. of the Title V operating permit:

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3561 Condition
6.1.1.	Affected facilities under Subpart OOOOa must be operated in a manner consistent with good air pollution control practice for minimizing emissions.	45CSR16 40 C.F.R. §60.5370a(b)	N/A

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3561 Condition
6.1.2.	VOC and Methane standards from Subpart OOOOa for reciprocating compressor affected facilities.	45CSR13 45CSR16 40 C.F.R. §60.5385a	13.1.1.
6.2.1.	Requirements to demonstrate initial compliance with the Subpart OOOOa standards for reciprocating compressors.	45CSR13 45CSR16 40 C.F.R. §§60.5410a and 60.5410a(c)	13.2.1.
6.2.2.	Requirements to demonstrate continuous compliance with the Subpart OOOOa standards for reciprocating compressors.	45CSR13 45CSR16 40 C.F.R. §60.5415a(c)	13.3.1.
6.4.1.	Applicable recordkeeping requirements for the reciprocating compressors.	45CSR13 45CSR16 40 C.F.R. §§60.5420a(c), (c)(3), (c)(6) to (c)(8), and (c)(17)	13.4.3.
6.5.1.	Applicable reporting requirements for the reciprocating compressors.	45CSR13 45CSR16 40 C.F.R. §§60.5420a(b), (b)(1), (b)(4), (b)(11), and (b)(12)	13.4.2. and 13.4.3.

NOTE: The following requirements were not included in the operating permit.

1. Condition 13.4.1. of R13-3561 has not been included in the operating permit. This condition requires the permittee to submit the notifications specified in 40 C.F.R. §§60.5420a(a)(1) and (a)(2). However, (a)(1) does not require the notifications of 40 C.F.R. §§60.7(a)(1), (a)(3), and (a)(4) and §60.15(d) for reciprocating compressors, and the notifications of (a)(2) are applicable to well affected facilities.
2. Conditions 13.1.1.d. and 13.4.3. of R13-3561 require the permittee to maintain records as required by 40 C.F.R. §60.5420a(c)(9). However, this recordkeeping requirement was marked as reserved and, therefore, has not been included in the operating permit.

### Section 7.0. – Subpart OOOOa Requirements for Fugitive Emissions Components

Per 40 C.F.R. §60.5430a, a fugitive emissions component is “any component that has the potential to emit fugitive emissions of methane or VOC at a compressor station, including valves, connectors, pressure relief devices, open-ended lines, flanges, covers and closed vent systems not subject to §60.5411 or §60.5411a, thief hatches or other openings on a controlled storage vessel not subject to §60.5395 or §60.5395a, compressors, instruments, and meters. Devices that vent as part of normal operations, such as natural gas-driven pneumatic controllers or natural gas-driven pumps, are not fugitive emissions components, insofar as the natural gas discharged from the device’s vent is not considered a fugitive emission. Emissions originating from other than the device’s vent, such as the thief hatch on a controlled storage vessel, would be considered fugitive emissions.”

The collection of fugitive emissions components is subject to the following regulations:

1. **45CSR13** – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, Permission to Commence Construction, and Procedures for Evaluation*
2. **45CSR16** – *Standards of Performance for New Stationary Sources*
3. **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*

The table below describes each condition added to Section 7.0. of the Title V operating permit:

<b>Title V Permit Condition</b>	<b>Summary of Permit Condition</b>	<b>Regulatory Citation</b>	<b>R13-3561 Condition</b>
7.1.1.	Affected facilities under Subpart OOOOa must be operated in a manner consistent with good air pollution control practice for minimizing emissions.	45CSR16 40 C.F.R. §60.5370a(b)	N/A
7.1.2.	Methane and VOC standards from Subpart OOOOa for fugitive emissions components affected facilities.	45CSR13 45CSR16 40 C.F.R. §§60.5397a(a) through (e), (f)(2), (g), (g)(2) through (4), and (h) through (j)	14.1.1.
7.2.1.	Requirements to demonstrate initial compliance with the Subpart OOOOa standards for fugitive emissions components.	45CSR16 40 C.F.R. §§60.5410a and 60.5410a(j)	N/A
7.2.2.	Requirements to demonstrate continuous compliance with the Subpart OOOOa standards for fugitive emissions components.	45CSR16 40 C.F.R. §60.5415a(h)	N/A
7.4.1.	Applicable recordkeeping requirements for fugitive emissions components.	45CSR16 40 C.F.R. §§60.5420a(c), (c)(15), and (c)(15)(i), (vi) to (ix)	N/A
7.5.1.	Applicable reporting requirements for fugitive emissions components.	45CSR16 40 C.F.R. §§60.5420a(b), (b)(1), (b)(7), (b)(7)(i)(A), (b)(7)(i)(B), (b)(7)(ii) to (iv), and (b)(11)	N/A

**Section 8.0. – Natural Gas Dehydration Units Controlled by Thermal Oxidizers [Emission Point IDs: 12E, 13E, 15E, 16E, 24E, and 25E]**

Two triethylene glycol (TEG) dehydration units are operated at the facility to remove water vapor from the inlet wet gas stream to meet pipeline specifications. Each dehydrator is comprised of a contactor/absorber tower, a flash tank

(Emission Units: DFT-01 and DFT-02; Emission Point IDs: 12E and 15E), and a regenerator/still vent (Emission Units: DSV-01 and DSV-02; Emission Point IDs: 13E and 16E). Two reboilers (Emission Units: RBV-01 and RBV-02; Emission Point IDs: 14E and 17E) are used to supply heat to the dehydration units. The applicable requirements for the reboilers are included in Section 9.0. of this operating permit.

In the dehydration process, the inlet wet gas stream flows through a contactor tower where the gas is contacted with lean glycol. The lean glycol absorbs the water in the gas stream and becomes rich glycol laden with water and trace amounts of hydrocarbons. The rich glycol is then routed to a flash tank where the glycol pressure is reduced to liberate the lighter hydrocarbons, primarily methane. The lighter hydrocarbons are routed from the flash tank to the reboiler for use as fuel, and the excess hydrocarbons vented to one of the thermal oxidizers (Emission Units: TOx-01 and TOx-02; Emission Point IDs: 24E and 25E). The rich glycol is then sent from the flash tank to the regenerator/still where the TEG is heated to drive off the water vapor and any remaining hydrocarbons. The off gases from the regenerator/still are vented to the thermal oxidizers.

The primary pollutants emitted in this process are VOCs and HAPs. The thermal oxidizers TOx-01 and TOx-02 are each operated to achieve a 99.5% destruction efficiency of these pollutants. TOx-01 has a maximum design heat input of 7.61 mMBTU/hr, and TOx-02 has a maximum design heat input of 6.70 mMBTU/hr.

The TEG dehydration units and the thermal oxidizers are subject to the following regulations:

1. **45CSR6** – *Control of Air Pollution from Combustion of Refuse*

This rule establishes emission standards to control the particulate matter emissions from the combustion of refuse. Under 45CSR§6-2.8., incineration is defined as “the destruction of combustible refuse by burning in a furnace designed for that purpose. For the purposes of this rule, the destruction of any combustible liquid or gaseous material by burning in a flare or flare stack, thermal oxidizer, or thermal catalytic oxidizer stack shall be considered incineration”. As the thermal oxidizers combust waste vapors from the dehydration units, the emission standards of 45CSR§6-4 are applicable to TOx-01 and TOx-02.

- a. Per 45CSR§6-4.1., PM emission limits for each unit are established using the following formula:

$$F \times \text{Incinerator Capacity (tons/hr)} = \text{Emissions (lbs/hr)}$$

The maximum rate at which the gas/waste gas is sent to TOx-01 is 573.71 lbs/hr (0.287 tons/hr) and to TOx-02 is 416.63 lbs/hr (0.208 tons/hr). Since the incinerator capacity of each thermal oxidizer is less than 15,000 lbs/hr, the factor F is 5.43 for each unit in accordance with Table 45-6 of 45CSR§6-4.1.

The PM emission limit of TOx-01 is:

$$5.43 \times 0.287 \text{ tons/hr} = 1.56 \text{ lbs/hr}$$

The PM emission limit of TOx-02 is:

$$5.43 \times 0.208 \text{ tons/hr} = 1.13 \text{ lbs/hr}$$

The thermal oxidizer TOx-01 has the potential to emit PM at a rate of 0.06 lbs/hr, and the thermal oxidizer TOx-02 has the potential to emit PM at a rate of 0.05 lbs/hr. Therefore, as the limits established above are much greater than the potential emissions of PM from either thermal oxidizer, compliance should be demonstrated through the NSR permit requirements to route vapors from the dehydration unit still vents and excess gas from the flash tanks to the thermal oxidizers at all times (Condition 8.1.3.a.), to operate the thermal oxidizers with a flame present at all times (Condition 8.1.3.b.), and to continuously monitor for the presence of the pilot flame (Condition 8.2.1.).

- b. Although the facility is located in Mashall County, 45CSR§6-4.2. is inapplicable to the thermal oxidizers because industrial incinerators are exempt from the requirement.
  - c. The thermal oxidizers must meet the 20% opacity limit of 45CSR§6-4.3., except as specified in 45CSR§6-4.4. Compliance with the requirements should be demonstrated by operating the units with a flame present at all times (Condition 8.1.3.b.), by operating the units with no visible emissions except for periods not to exceed a total of five minutes in any two-hour period (Condition 8.1.3.e.), and conducting a Method 22 opacity test (Condition 8.3.1.).
  - d. The thermal oxidizers are also subject to the standards in 45CSR§§6-4.5. and -4.6. which prohibit the emission of unburned refuse and require the prevention of objectionable odors from the units, respectively.
  - e. At the discretion of the Secretary, the permittee may also be required to conduct stack testing to determine particulate matter loading in accordance with 45CSR§§6-7.1. and -7.2.
2. **45CSR13** – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, Permission to Commence Construction, and Procedures for Evaluation*
  3. **45CSR34** – *Emission Standards for Hazardous Air Pollutants*
  4. **40 C.F.R. Part 63 Subpart HH** – *National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities*

Subpart HH of the NESHAP is applicable to facilities in the oil and natural gas production source category, which includes compressor stations that transport natural gas prior to a natural gas processing plant or the point of custody transfer. As the Ridgeline Compressor Station is located prior to this point, the compressor station is a “production field facility” subject to Subpart HH.

Per the definition of a major source in 40 C.F.R. §63.761, the major source determination for production field facilities is determined by aggregating HAP emissions from only the glycol dehydration units and the storage vessels. As the potential HAP emissions are below Title V major source thresholds, the Ridgeline Compressor Station is an area source of HAPs. Therefore, the Ridgeline Compressor Station is an area source of HAPs under Subpart HH, and, in accordance with 40 C.F.R. §63.760(b)(2), the TEG dehydration units are the only affected sources subject to Subpart HH.

Provided that the actual average benzene emissions from the dehydration units remain less than 0.90 megagrams per year (1 tpy), 40 C.F.R. §§63.764(e)(1) and (e)(1)(ii) exempt the TEG dehydration units from the standards set forth in §63.764(d). With the exemption, the permittee is subject to the general requirements of §63.764(j); the monitoring requirements of §63.772(b)(2)(i); and the recordkeeping requirements of §§63.774(d)(1) and (d)(1)(ii). The conditional requirement of 40 C.F.R. §63.760(c) has also been included in the operating permit; the permittee is subject to this requirement if actual emissions of HAPs exceed or previously exceeded 5 tpy for a single HAP or 12.5 tpy for a combination of HAPs.



The table below describes each condition added to Section 8.0. of the Title V operating permit:

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3561 Condition
8.1.1.	The maximum throughput of dry natural gas for each dehydration unit's flash tank and still vent shall not exceed: 250 mmscf for DFT-01/DSV-01 and 160 mmscf for DFT-02/DSV-02.	45CSR13	7.1.1.
8.1.2.	Emissions from the dehydration units must be controlled by the thermal oxidizers TOx-01 and TOx-02, which shall be designed to achieve a guaranteed control efficiency of 99.5% for VOC and HAP emissions.	45CSR13	7.1.2.
8.1.3.	<p>Design and operation requirements for the thermal oxidizers TOx-01 and TOx-02.</p> <p>The manufacturer guaranteed control efficiency of 99.5% is achieved if the thermal oxidizers are operated at a minimum combustion chamber temperature of 1,700°F. The minimum combustion chamber temperature has been added to paragraph c. of this condition.</p> <p>The applicable emission standards of 45CSR6 have been added as paragraphs f.1. through f.5. of this condition.</p> <p>NOTE: The following references in the R13-3561 requirements of Condition 7.1.3. have been corrected in the operating permit.</p> <p>a. 7.1.3.b. requires the thermal oxidizers to be operated with a flame present at all times as determined by the methods in 6.2.1. The reference to 6.2.1. is likely a typo and has been corrected in the operating permit to the requirement to use a thermocouple to monitor for the presence of a pilot flame (8.2.1. of the operating permit).</p> <p>b. 7.1.3.e. contains the visible emission requirements for the thermal oxidizers and refers to the compliance demonstration methods of 6.3.1. The reference to 6.3.1. is likely a typo and has been corrected in the operating permit to refer to the Method 22 opacity test requirements (8.3.1. of the operating permit).</p>	<p>45CSR§§6-4.1. and -4.3. through -4.6.</p> <p>45CSR13</p> <p>45CSR§30-5.1.c.</p>	7.1.3.
8.1.4.	Maximum hourly and annual emission limits for NO <sub>x</sub> , CO, VOCs, and aggregate HAPs from the thermal oxidizers.	45CSR13	7.1.4.
8.1.5.	The major source determination for Subpart HH must be updated annually if actual emissions are greater than 5 tpy for a single HAP or 12.5 tpy for aggregate HAPs.	<p>45CSR13</p> <p>45CSR34</p> <p>40 C.F.R. §63.760(c)</p>	7.1.5.
8.1.6.	The permittee is exempt from the requirements of 40 C.F.R. §63.764(d) if the actual average emissions of benzene from the TEG dehydration unit are less than 0.90 megagram per year (1 tpy).	<p>45CSR13</p> <p>45CSR34</p> <p>40 C.F.R. §§63.764(e), (e)(1), and (e)(1)(ii)</p>	7.1.6.

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3561 Condition
8.1.7.	Any affected source must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions.	45CSR34 40 C.F.R. §63.764(j)	N/A
8.2.1.	Compliance with the thermal oxidizers' operation requirements in Conditions 8.1.3.b. and d. is demonstrated by monitoring the pilot flame with a thermocouple.	45CSR13	7.2.1.
8.2.2.	The dry natural gas throughput to each of the dehydration units must be monitored.	45CSR13	7.2.2.
8.2.3.	The combustion chamber temperature shall be continuously monitored and recorded. Any deviations below the minimum temperature must be reported.	45CSR§30-5.1.c.	N/A
8.3.1.	To demonstrate compliance with the opacity requirements for the thermal oxidizers, the permittee must conduct Method 22 visible emissions testing.  NOTE: In the underlying Condition 7.3.1. of R13-3561, this requirement is stated to demonstrate compliance with the opacity requirements of the nonexistent Condition 7.1.2.f. In this operating permit, this reference has been corrected to the thermal oxidizers' visible emission requirements in Condition 8.1.3.e. (Condition 7.1.3.e. of R13-3561).	45CSR13	7.3.1.
8.3.2.	Upon request of the Director, compliance shall be demonstrated with the VOC and HAP emission limits of Condition 8.1.4. using GLYCalc Version 3.0 or higher.	45CSR13	7.3.2.
8.3.3.	Procedure to determine the actual average benzene emissions from the glycol dehydration units.	45CSR13 45CSR34 40 C.F.R. §§63.772(b)(2) and (b)(2)(i)	7.3.3.
8.3.4.	Parameters that must be included if the ProMax model is used as an alternative to the GLYCalc model.	45CSR13	7.3.4.
8.3.5.	The permittee must notify the responsible agency before the use of the ProMax model as an alternative to the GLYCalc model.	45CSR13	7.3.5.
8.3.6.	The permittee must continue to use the ProMax model as an alternative until approved to use another method.	45CSR13	7.3.6.
8.3.7.	Particulate matter emissions testing for each thermal oxidizer must be conducted at such reasonable times as the Secretary may designate.	45CSR§§6-7.1. and -7.2.	N/A

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3561 Condition
8.4.1.	<p>Maintain records of testing conducted to demonstrate compliance with the VOC and HAP emissions thresholds.</p> <p>NOTE: In the underlying permit R13-3561, Condition 7.4.1. states that compliance with Conditions 7.1.3. and 6.3.2. will be demonstrated by maintaining records of testing conducted in accordance with Condition 7.3.2. The conditions referenced have been corrected in the operating permit as described below.</p> <p>a. R13-3561 does not contain a requirement numbered 6.3.2. and is likely a typo. Therefore, the reference has been updated in the operating permit to refer to the requirements to demonstrate compliance with the VOC and HAP emission thresholds using GLYCalc Version 3.0 (8.3.2. of the operating permit).</p> <p>b. The reference to 7.1.3., which contains the design and operation requirements of the thermal oxidizers, is also likely an error, because 7.3.2. is stated to demonstrate compliance with 7.1.4. (VOC and HAP emission limits) and requires the permittee to demonstrate compliance with the VOC and HAP emission thresholds using GLYCalc Version 3.0 or higher. Therefore, this condition has been updated in the operating permit to reference the VOC and HAP emission limits of Condition 8.1.4.</p>	45CSR13	7.4.1.
8.4.2.	Maintain the records specified by the monitoring requirements of Section 8.2. and the testing requirements of Section 8.3.	45CSR13	7.4.2.
8.4.3.	Maintain records of the potential-to-emit calculations for hazardous air pollutants.	45CSR13	7.4.3.
8.4.4.	Maintain records of the dry natural gas throughput through the dehydration system.	45CSR13	7.4.4.
8.4.5.	Maintain records of the actual average benzene emissions to demonstrate that the permittee is exempt from the requirements of 40 C.F.R. §63.764(d).	45CSR13 45CSR34 40 C.F.R. §§63.764(e), 63.774(d)(1) and (d)(1)(ii)	7.4.5.
8.4.6.	<p>Records of Conditions 8.4.1. through 8.4.5. must be maintained on-site or in a readily accessible off-site location for a period of five years.</p> <p>NOTE: Condition 7.4.6. of R13-3561 references the records of Section 6.4. This typo has been corrected in the operating permit.</p>	45CSR13	7.4.6.
8.4.7.	Records of each thermal oxidizer’s combustion chamber temperature must be maintained.	45CSR§30-5.1.c.	N/A
8.4.8.	A copy of the manufacturer’s operation and maintenance specifications for each thermal oxidizer must be maintained.	45CSR§30-5.1.c.	N/A

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3561 Condition
8.5.1.	If testing is required to demonstrate compliance with Condition 8.3.3., the permittee must submit testing protocol at least thirty days prior and a notification of the testing date at least fifteen days prior to testing.	45CSR13	7.5.1.
8.5.2.	The permittee must report any deviations from the allowable visible emission requirements.	45CSR13	7.5.2.
8.5.3.	The permittee must report any deviations from the thermal oxidizer design and operation criteria in Condition 8.1.3.	45CSR13	7.5.3.
8.5.4.	Exemption to the reporting requirements for area sources meeting the benzene exemption and subject to 40 C.F.R. Part 63 Subpart HH.	45CSR34 40 C.F.R. §§63.775(c) and (c)(8)	N/A

**Section 9.0. – Reboilers [Emission Point IDs: 14E and 17E]**

Each TEG dehydration unit is associated with a 2.00 mmBTU/hr reboiler (RBV-01, RBV-02) which supplies heat to the regenerator/still. Lighter hydrocarbons formed in the flash tanks during dehydration operations are routed to the respective reboiler for fuel.

The reboilers are subject to the following regulations:

1. **45CSR2** – *Control of Particulate Matter Air Pollution from the Combustion of Fuel in Indirect Heat Exchangers*

45CSR2 establishes particulate matter emission standards and requirements for fuel burning units. Per 45CSR§2-2.10., a fuel burning unit includes any furnace, boiler apparatus, device, mechanism, stack, or structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer. Therefore, the reboilers are subject to the particulate matter emission standards of this rule.

The reboilers are subject to the visible emissions standards in 45CSR§2-3. The 10% opacity limit of 45CSR§2-3.1. has been included in the operating permit as Condition 9.1.2. Compliance with this limit is demonstrated through visible emission checks conducted in accordance with Method 9 of 40 C.F.R. Part 60 Appendix A, as designated by the Director (45CSR§2-3.2.; Condition 9.3.1.). The permittee is also required to maintain records of each visible emission check (Condition 9.4.1.) and to report any deviations discovered during the observations (Condition 9.5.1.).

As each of the reboilers have a maximum design heat input of less than 10 mmBTU/hr, the permittee is exempt from the weight emission standards of Section 4; the control of fugitive particulate matter standards of Section 5; the registration standards of Section 6; the testing, monitoring, recordkeeping, and reporting requirements of Section 8; and the start-up, shutdown, and malfunction requirements of Section 9 of this rule per 45CSR§2-11.1.

2. **45CSR10** – *Control of Air Pollution from the Emission of Sulfur Oxides*

45CSR10 establishes sulfur oxides emission standards and requirements for fuel burning units. Per 45CSR§10-2.8., a fuel burning unit includes any furnace, boiler apparatus, device, mechanism, stack or

structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer. Therefore, the reboilers are subject to the emission standards of this rule.

However, per 45CSR§10-10.1., fuel burning units with a design heat input of less than 10 mmBTU/hr are exempt from the weight emission standards of Section 3; the permit requirements of Section 7; and the testing, monitoring, recordkeeping, and reporting requirements of Section 8. Furthermore, Section 4 is inapplicable because the reboilers are not part of a manufacturing process, and Section 5 is inapplicable because the units do not combust a refinery or other process gas stream.

Therefore, although the reboilers RBV-01 and RBV-02 are subject to 45CSR10, the emission units currently have no applicable requirements under this rule.

3. **45CSR13** – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, Permission to Commence Construction, and Procedures for Evaluation*

The table below describes each condition added to Section 9.0. of the Title V operating permit:

<b>Title V Permit Condition</b>	<b>Summary of Permit Condition</b>	<b>Regulatory Citation</b>	<b>R13-3561 Condition</b>
9.1.1.	Maximum design heat input of the reboilers.	45CSR13	8.1.1.
9.1.2.	45CSR2 visible emission limit.	45CSR§2-3.1. 45CSR13	8.1.2.
9.2.1.	Method 9 visible emissions observations shall be conducted at such times the Secretary may designate.	45CSR13	8.2.1.
9.3.1.	Testing methods for visible emissions observations.	45CSR§2-3.2. 45CSR13	8.3.1.
9.4.1.	Compliance with Condition 9.2.1. shall be demonstrated by maintaining records of each visible emissions check.	45CSR13	8.4.1.
9.5.1.	The permittee must report any deviations from the allowable visible emissions limit.	45CSR13	8.5.1.

### **Section 10.0. – Produced Water Storage Tanks [Emission Point IDs: 18E to 21E]**

Four 400-bbl storage tanks (Emission Units: TK-01 to TK-04) with applicable requirements are operated at the Ridgeline Compressor Station. The produced water from the inlet separators and the dehydrators is stored in these tanks. Emissions from the storage tanks are not controlled. The produced water is removed from the facility via tanker truck.

The produced water storage tanks are subject to the following regulations:

1. **45CSR13** – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, Permission to Commence Construction, and Procedures for Evaluation*

The table below describes each condition added to Section 10.0. of the Title V operating permit:

<b>Title V Permit Condition</b>	<b>Summary of Permit Condition</b>	<b>Regulatory Citation</b>	<b>R13-3561 Condition</b>
10.1.1.	The maximum annual throughput of produced water to the storage tanks shall not exceed 5,040,000 gallons.	45CSR13	9.1.1.
10.1.2.	Hourly and annual limits for VOC emissions from the storage tanks TK-01 to TK-04.	45CSR13	9.1.2.
10.1.3.	Requirements for the thief hatch of each storage tank.	45CSR13	9.1.3.
10.2.1.	The permittee must monitor the throughput of produced water to the storage tanks.	45CSR13	9.2.1.
10.4.1.	Records for TK-01 to TK-04 must be kept in accordance with Condition 3.4.2. of this operating permit.	45CSR13	9.3.1.
10.4.2.	Records of the aggregate throughput for the storage tanks must be maintained.	45CSR13	9.3.2.

**Section 11.0. – Truck Load-Out [Emission Point ID: 22E]**

Produced water collected into the storage tanks is removed from the facility via tanker trucks. Emissions from the truck loading operations are not controlled.

The truck loading operations are subject to the following regulations:

1. **45CSR13** – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, Permission to Commence Construction, and Procedures for Evaluation*

The table below describes each condition added to Section 11.0. of the Title V operating permit:

<b>Title V Permit Condition</b>	<b>Summary of Permit Condition</b>	<b>Regulatory Citation</b>	<b>R13-3561 Condition</b>
11.1.1.	All above-ground piping, valves, pumps, etc. shall be installed, maintained, and operated to prevent any substantive fugitive emissions.	45CSR13	10.1.1.
11.1.2.	The maximum annual throughput of produced water loaded shall not exceed 5,040,000 gallons.	45CSR13	10.1.2.
11.1.3.	Annual emission limits for VOCs and aggregate HAPs from truck loading operations.	45CSR13	10.1.3.
11.1.4.	Truck loading shall be operated according to the plans and specifications in Permit Application R13-3561.	45CSR13	10.1.4.
11.4.1.	Records for truck loading operations must be kept in accordance with Condition 3.4.2. of this operating permit.	45CSR13	10.3.1.

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3561 Condition
11.4.2.	Records of the throughput for truck loading operations must be maintained to demonstrate compliance with the throughput limit and the emission limits.	45CSR13	10.3.2.

**Section 12.0. – Compressor Blowdown and Pigging Operations controlled by an Elevated Flare [Emission Point IDs: 7E, 23E, and 26E]**

Compressor blowdown and emergency shutdown testing operations (Emission Unit: BD) as well as pigging operations (Emission Unit: PIG) are conducted at the facility. Emissions from BD and PIG are routed to the elevated flare (Emission Unit: FLR-01). The elevated flare has a control efficiency of 98% for VOCs and HAPs.

The compressor blowdown operations, pigging operations, and the elevated flare are subject to the following regulations:

1. **45CSR6 – Control of Air Pollution from Combustion of Refuse**

This rule establishes emission standards to control the particulate matter (PM) emissions from the combustion of refuse. Under 45CSR§6-2.8., incineration is defined as “the destruction of combustible refuse by burning in a furnace designed for that purpose. For the purposes of this rule, the destruction of any combustible liquid or gaseous material by burning in a flare or flare stack, thermal oxidizer, or thermal catalytic oxidizer stack shall be considered incineration.” As the flare combusts waste vapors from the compressor blowdown events and the pigging events, the emission standards of 45CSR§6-4 are applicable to the flare FLR-01.

a. Per 45CSR§6-4.1., PM emission limits for each unit are established using the following formula:

$$F \times \text{Incinerator Capacity (tons/hr)} = \text{Emissions (lbs/hr)}$$

The rate at which gas is sent to the flare is 295.03 lbs/hr (0.15 tons/hr). Since the incinerator capacity of the flare is less than 15,000 lbs/hr, the factor F is 5.43 in accordance with Table 45-6 of 45CSR§6-4.1.

Therefore, the PM emission limit of the flare is:

$$5.43 \times 0.15 \text{ tons/hr} = 0.81 \text{ lbs/hr}$$

The flare FLR-01 has the potential-to-emit PM at a rate of 0.05 lbs/hr. Therefore, as the limit established above is much greater than the potential emissions from the flare, compliance should be demonstrated through the NSR permit requirements to monitor the waste gas throughput of the flare (Conditions 12.1.6. and 12.2.2.), to operate the flare with a pilot flame when emissions are vented (Condition 12.1.8.), and to continuously monitor for the presence of the pilot flame (Condition 12.2.1.).

b. Although the facility is located in Marshall County, 45CSR§6-4.2 is inapplicable to FLR-01 because the operation of flares is exempt from the requirement.

c. The flare must meet the 20% opacity limit of 45CSR§6-4.3., except as specified in 45CSR§6-4.4. As the potential PM emissions from the flare are minimal, compliance with the requirements should be demonstrated by operating the flare with a pilot flame when emissions are vented as required by Condition 12.1.8., by continuously monitoring for the presence or absence of a pilot flame using a thermocouple (Condition 12.2.1.), and by conducting Method 9 emission observations (Condition 12.3.1.).

- d. The flare is also subject to the standards in 45CSR§§6-4.5. and -4.6. which prohibit the emission of unburned refuse and require the prevention of objectionable odors from the flare, respectively.
- e. At the discretion of the Secretary, the permittee may be required to conduct stack testing in accordance with 45CSR§§6-7.1. and -7.2.

2. **45CSR13** – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, Permission to Commence Construction, and Procedures for Evaluation.*

The table below describes each condition added to Section 12.0. of the Title V operating permit:

<b>Title V Permit Condition</b>	<b>Summary of Permit Condition</b>	<b>Regulatory Citation</b>	<b>R13-3561 Condition</b>
12.1.1.	The annual limits for the number of compressor blowdown events and the volume per event.	45CSR13	11.1.1.
12.1.2.	The annual limits for the number of pigging events and the volume per event.	45CSR13	11.1.2.
12.1.3.	The annual limits for the number of plant shutdown events and the maximum volume per event.	45CSR13	11.1.3.
12.1.4.	The waste gas from the compressor blowdown and pigging operations must be controlled by the flare at all times to achieve a 98% control efficiency for VOCs and HAPs.	45CSR13	11.1.4.
12.1.5.	Annual emission limits for nitrogen oxides, carbon monoxide, and volatile organic compounds from the flare FLR-01.	45CSR13	11.1.5.
12.1.6.	Annual limit for the volume of gas consumed in the flare.	45CSR13	11.1.7.
12.1.7.	45CSR6 applicable requirements for the flare, including the opacity requirement of Condition 11.1.8. of R13-3561.	45CSR§§6-4.1. and -4.3. through -4.6. 45CSR13	11.1.8.
12.1.8.	The pilot flame of the flare must be operated at all times when emissions may be vented.	45CSR13	11.1.9.
12.1.9.	The flare shall be operated and designed in accordance with the application for R13-3561.	45CSR13	11.1.10.
12.2.1.	Compliance with Condition 12.1.8. will be demonstrated by using a thermocouple to monitor for the presence or absence of a flare pilot flame.	45CSR13	11.2.1.
12.2.2.	Compliance with Condition 12.1.6. will be demonstrated by monitoring the throughput to the flare.	45CSR13	11.2.2.
12.3.1.	Compliance with the visible emissions requirements of 45CSR§§6-4.3. (Condition 12.1.7.b.) and -4.4. (Condition 12.1.7.c.) shall be demonstrated by conducting Method 9 emission observations as designated by the Secretary.	45CSR13	11.3.1.



<b>Title V Permit Condition</b>	<b>Summary of Permit Condition</b>	<b>Regulatory Citation</b>	<b>R13-3561 Condition</b>
12.3.2.	Particulate matter emissions testing for the flare.	45CSR§§6-7.1. and -7.2.	N/A
12.4.1.	Records required in Section 12.4. must be kept in accordance with Condition 3.4.2.	45CSR13	11.4.1.
12.4.2.	Compliance with 12.1.1. is demonstrated by maintaining a record of compressor blowdown events and the estimated volume per event.	45CSR13	11.4.2.
12.4.3.	Compliance with 12.1.2. is demonstrated by maintaining a record of pigging events and the estimated volume per event.	45CSR13	11.4.3.
12.4.4.	Compliance with 12.1.3. is demonstrated by maintaining a record of shutdown events and the estimated volume per event.	45CSR13	11.4.4.
12.4.5.	Compliance with Conditions 12.1.8. and 12.2.1. is demonstrated by maintaining a record of the times and duration of periods when the pilot flame is absent.	45CSR13	11.4.5.
12.4.6.	Compliance with the visible emission requirements of 45CSR§§6-4.3. (Condition 12.1.7.b.) and -4.4. (Condition 12.1.7.c.) are demonstrated by maintaining records of testing conducted according to 12.3.1.	45CSR13	11.4.6.
12.4.7.	Records must be kept for the monitoring requirements of Section 12.2. and the testing requirements of Section 12.3.	45CSR13	11.4.7.
12.5.1.	The results of visible emissions testing conducted according to Condition 12.3.1. must be submitted within sixty days.	45CSR13	11.5.1.
12.5.2.	Any deviations from the allowable visible emissions requirements discovered during observations must be reported within ten calendar days.	45CSR13	11.5.2.
12.5.3.	Any deviations from the flare design and operation criteria of Condition 12.1.9. and the Permit Application for R13-3561 must be reported within ten calendar days.	45CSR13	11.5.3.
12.5.4.	Emergency use of the flare must be reported to the Director.	45CSR13	11.5.4.
12.5.5.	The permittee must report within ten calendar days any time the flare is not operating when emissions are vented to it.	45CSR13	11.5.5.

NOTE: Condition 11.1.11. of R13-3561 has not been included in this operating permit. This condition requires the permittee to comply with the emergency and affirmative defense requirements contained in Section 2.12. of the NSR permit. However, following the issuance of R13-3561, the emergency requirements were removed from the boilerplate requirements of NSR permits and Title V operating permits.

## Non-Applicability Determinations

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

1. **45CSR21** – *Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds* – This rule applies to sources located in Putnam County, Kanawha County, Cabell County, Wayne County, and Wood County. The facility is located in Marshall County, and, therefore, the rule is inapplicable.
2. **45CSR27** – *To Prevent and Control the Emissions of Toxic Air Pollutants* – This rule does not apply to the Ridgeline Compressor Station because, per 45CSR§27-2.4., the equipment used in the production and distribution of petroleum products is not considered a chemical processing unit, provided that such equipment does not produce or contact materials containing more than 5% benzene by weight.
3. **40 C.F.R. Part 60 Subparts D, Da, Db, and Dc** – *Standards of Performance for Steam Generators* – As there are no steam generating units with a maximum design heat input equal to or greater than 10 mmBTU/hr operated at the facility, Subparts D, Da, Db, and Dc do not apply to the Ridgeline Compressor Station per 40 C.F.R. §§60.40(a), 60.40Da(a), 60.40b(a), and 60.40c(a), respectively.
4. **40 C.F.R. Part 60 Subparts K, Ka, Kb, and Kc** – *Standards of Performance for Storage Vessels for Petroleum Liquids/Volatile Organic Liquids* – Subparts K and Ka do not apply to the Ridgeline Compressor Station because construction of the storage vessels used at the facility began after the applicability dates of each subpart (Subpart K – after June 11, 1973 and prior to May 19, 1978; Subpart Ka – after May 18, 1978 and prior to July 23, 1984). Subpart Kc does not apply to the Ridgeline Compressor Station because construction of the storage vessels used at the facility began before the applicability date of the subpart (Subpart Kc – after October 4, 2023). Per 40 C.F.R. §60.110b(a), Subpart Kb does not apply to the facility because each volatile organic liquid storage vessel has a capacity less than 75 m<sup>3</sup> (471.73 bbl or 19,812.9 gallons).
5. **40 C.F.R. Part 60 Subpart GG** – *Standards of Performance for Stationary Gas Turbines* – The facility's compressor turbine, CT-01, is subject to the requirements of 40 C.F.R. Part 60 Subpart KKKK in accordance with §60.4305(a). Therefore, per §60.4305(b), CT-01 is exempt from the requirements of Subpart GG.
6. **40 C.F.R. Part 60 Subpart KKK** – *Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants for which Construction, Reconstruction, or Modification Commenced after January 20, 1984 and on or before August 23, 2011* – The Ridgeline Compressor Station is not a natural gas processing plant as defined in 40 C.F.R. §60.631 and, therefore, is not subject to the provisions of Subpart KKK.
7. **40 C.F.R. Part 60 Subpart LLL** – *Standards of Performance for SO<sub>2</sub> Emissions from Onshore Natural Gas Processing for which Construction, Reconstruction, or Modification Commenced after January 20, 1984 and on or before August 23, 2011* – Per 40 C.F.R. §60.640(a), Subpart LLL does not apply because no sweetening units are operated at the compressor station.
8. **40 C.F.R. Part 60 Subpart IIII** – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* – This subpart does not apply because only spark ignition internal combustion engines are operated at the Ridgeline Compressor Station.
9. **40 C.F.R. Part 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* – Construction of the equipment at the Ridgeline Compressor Station began after the applicability date of this subpart. Therefore, Subpart OOOO is inapplicable to the facility.
10. **40 C.F.R. Part 60 Subpart OOOOb** – *Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced after December 6, 2022* – Construction of the

equipment at the Ridgeline Compressor Station began prior to the applicability date of this subpart. Therefore, Subpart OOOOb is inapplicable to the facility.

11. **40 C.F.R. Part 63 Subpart HHH** – *National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities* – The Ridgeline Compressor Station is not a natural gas transmission and storage facility that transports or stores natural gas prior to entering a pipeline to a local distribution company or to a final end user. Additionally, the facility is not a major source of HAP emissions. Therefore, per 40 C.F.R. §63.1270(a), the Ridgeline Compressor Station is not subject to Subpart HHH.
12. **40 C.F.R. Part 63 Subpart YYYY** – *National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines* – Per 40 C.F.R. §63.6080, Subpart YYYY applies to stationary combustion turbines located at major sources of HAP emissions. As the Ridgeline Compressor Station is not a major source of HAPs, Subpart YYYY is inapplicable to the facility.
13. **40 C.F.R. Part 63 Subpart DDDDD** – *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters* – Per 40 C.F.R. §63.7485, Subpart DDDDD applies to boilers and process heaters located at major sources of HAP emissions. As the Ridgeline Compressor Station is not a major source of HAPs, Subpart DDDDD is inapplicable to the facility.
14. **40 C.F.R. Part 63 Subpart JJJJJ** – *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* – Per 40 C.F.R. §63.11195(e), gas-fired boilers are exempt from the standards of Subpart JJJJJ. Therefore, the natural gas-fired reboilers (RBV-01 and RBV-02) operated at the Ridgeline Compressor Station are not subject to Subpart JJJJJ.
15. **40 C.F.R. Part 64** – *Compliance Assurance Monitoring (CAM)*

Emissions of VOCs from the pigging operations (PIG) are controlled by the flare FLR-01, and emissions of CO, VOCs, and Formaldehyde from the generator engine (GE-01) are controlled by the oxidation catalyst (OxCat-05). However, as the pre-control device emissions from neither the pigging operations nor from the generator engine exceed the Title V major source thresholds, the emission units are not subject to CAM, per 40 C.F.R. §64.2(a)(3).

The CAM rule is applicable to each of the compressor engines (CE-01 to CE-04) for emissions of CO and Formaldehyde and to the dehydration units (DFT-01/DSV-01 and DFT-02/DSV-02) and the compressor blowdown operations (BD) for emissions of VOCs.

- a. Although the compressor engines CE-01 to CE-04 are subject to the provisions of 40 C.F.R. Part 60 Subpart JJJJ and 40 C.F.R. Part 63 Subpart ZZZZ, the NSR permit contains more stringent limits for NO<sub>x</sub>, CO, and VOCs and neither Subpart JJJJ nor Subpart ZZZZ contain emission limits for Formaldehyde. Therefore, the CAM exemption of 40 C.F.R. §64.2(b)(1)(i) is inapplicable to the NSR emission limits for these pollutants.

Emissions of CO and Formaldehyde from the engines are controlled by the oxidation catalysts OxCat-01 to OxCat-04 (§64.2(a)(2)); each of the engines are subject to emission limits for CO and Formaldehyde under Condition 5.1.1. of R13-3561 (§64.2(a)(1)); and each engine has pre-control device emissions for CO and Formaldehyde which exceed the Title V major source thresholds for criteria pollutants and individual HAPs, respectively (CE-01 to CE-04 each have pre-control device CO emissions of 119.73 tpy and pre-control device Formaldehyde emissions of 10.15 tpy) (§64.2(a)(3)).

The pre-control device emissions of VOCs from each compressor engine are below the Title V major source threshold for criteria pollutants, and, therefore, the compressor engines are not subject to CAM for emissions of VOCs in accordance with §64.2(a)(3). The oxidation catalysts do not control emissions of NO<sub>x</sub> from the engines, and, therefore, the compressor engines are not subject to CAM for emissions of NO<sub>x</sub> in accordance with §64.2(a)(2).

- b. Emissions of VOCs from the dehydration units are controlled by the thermal oxidizers TOx-01 and TOx-02 (§64.2(a)(2)); each thermal oxidizer is subject to an emission limit for VOCs under the NSR permit (§64.2(a)(1)); and each dehydration unit has pre-control device VOC emissions which exceed the Title V major source threshold (DFT-01/DSV-01 has pre-control device VOC emissions of 768 tpy and DFT-02 has pre-control device VOC emissions of 744 tpy) (§64.2(a)(3)).

The dehydration units also meet the CAM applicability requirements for emissions of HAPs. However, as the dehydration units are subject to Subpart HH of the NESHAP, the dehydration units are exempt from CAM for emissions of HAPs per §64.2(b)(1)(i).

- c. Emissions of VOCs due to compressor blowdown operations are controlled by the elevated flare FLR-01 (§64.2(a)(2)); the flare is subject to emission limits for VOCs under the NSR permit (§64.2(a)(1)); and the compressor blowdown operations have pre-control device VOC emissions of 121 tpy which exceeds the Title V major source threshold (§64.2(a)(3)).

However, as the post-control device CO and Formaldehyde emissions from the compressor engines, the post-control device VOC emissions from the dehydration units, and the post-control device VOC emissions from the compressor blowdown operations are below the Title V major source thresholds, each of these units are considered “Other Pollutant-Specific Emissions Units” in accordance with §64.5(b). Therefore, the submission of a CAM Plan is deferred until the renewal application is submitted for this operating permit.

### **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: December 9, 2024

Ending Date: January 8, 2025

### **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.