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

## **Fact Sheet**



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

Permit Number: **R30-09500087-2022**Application Received: **May 4, 2021**Plant Identification Number: **03-54-095-00087** 

Permittee: **Antero Midstream LLC**Facility Name: **Middlebourne V Compressor Station** 

Mailing Address: 1615 Wynkoop Street, Denver, CO 80202

Physical Location: Middlebourne, Tyler County, West Virginia

UTM Coordinates: 513.603 km Easting • 4374.245 km Northing • Zone 17

Directions: From Middlebourne, WV, drive northeast on WV-18N/ Main St. toward

Court St. / Dodd St. Drive 3.8 miles and turn right toward Elk Fork. Continue onto Elk Fork for 0.4 miles. Turn right on Elk Fork Rd and

drive for 3.2 miles. The facility entrance will be on the right.

#### **Facility Description**

The Middlebourne V Compressor Station is an existing natural gas compressor station covered by Standard Industrial Classification (SIC) 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day, fifty-two (52) weeks per year. The station separates, compresses, and dries gas off the inlet pipeline stream. The station includes eighteen (18) compressor engines with oxidation catalysts, two (2) natural gas generators, two (2) 260 MMscfd dehydrators with two (2) reboilers, one (1) 130 MMscfd dehydrator with one (1) reboiler, five (5) 400-bbl condensate tanks, five (5) 400-bbl produced water tanks, one (1) 500-bbl settling tank, one (1) 0.5 MMBtu/hr fuel conditioning heater, one (1) 0.75 MMBtu/hr fuel conditioning heater, three (3) thermal oxidizers, three (3) vapor recovery units (VRU), liquid loadout operations, fugitive component emissions, and auxiliary tanks.

#### **Emissions Summary**

Regulated Pollutants	Potential Emissions	2020 Actual Emissions
Carbon Monoxide (CO)	101.64	15.77
Nitrogen Oxides (NO <sub>X</sub> )	233.40	69.59
Particulate Matter (PM <sub>2.5</sub> )	14.69	4.42
Particulate Matter (PM <sub>10</sub> )	14.69	4.60
Total Particulate Matter (TSP)	16.51	4.60
Sulfur Dioxide (SO <sub>2</sub> )	0.84	0.26
Volatile Organic Compounds (VOC)	234.25	91.54

 $PM_{10}$  is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2020 Actual Emissions
Benzene	0.70	0.15
Toluene	1.77	0.16
Ethylbenzene	0.17	0.02
Xylenes	0.61	0.08
n-Hexane	4.12	0.45
Acetaldehyde	1.47	0.38
Acrolein	3.79	1.68
Methanol	1.85	0.82
Formaldehyde	9.05	3.80
Other HAPs	1.19	0.41
Total HAPs	24.72	7.95

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

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

This facility has the potential to emit 101.64 tons per year CO, 233.40 tons per year NO<sub>X</sub>, 234.25 tons per year VOC. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Antero Midstream 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.

This facility has been found to be subject to the following applicable rules:

Federal and State:					
45CSR2	To Prevent And Control Particulate Air Pollution From				
	Combustion Of Fuel In Indirect Heat Exchangers				
45CSR6	Control Of Air Pollution From Combustion Of Refuse.				
45CSR11	Standby Plans For Emergency Episodes.				
45CSR13	Permits For Construction, Modification, Relocation				
	Operation Of Stationary Sources Of Air Pollutants,				
	Notification Requirements, Administrative Updates,				
	Temporary Permits, General Permits, And Procedures For				
	Evaluation				
45CSR16	Standards Of Performance For New Stationary Sources				
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such a				
	annual emission inventory reporting.				
45CSR30	Operating permit requirement.				
45CSR34	Emission Standards for Hazardous Air Pollutants				
40 C.F.R. Part 60, Subpart JJJJ	Standards of Performance for Stationary Spark Ignition				
	Internal Combustion Engines				
40 C.F.R. Part 60, Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas				
-	Facilities for which Construction, Modification or				
	Reconstruction Commenced After September 18, 2015				
40 C.F.R. Part 61	Asbestos inspection and removal				
40 C.F.R. Part 63, Subpart HH	National Emission Standards for Hazardous Air Pollutants				
-	From Oil and Natural Gas Production Facilities				
40 C.F.R. Part 63, Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for				
	Stationary Reciprocating Internal Combustion Engines				
40 C.F.R. Part 82, Subpart F	Ozone depleting substances				
Section Co. 1					
State Only: 45CSR4	No objectionable odore				
	No objectionable odors.				
45CSR17	To Prevent And Control Particulate Matter Air Pollution From				
	Materials Handling, Preparation, Storage And Other Sources				

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.

Of Fugitive Particulate Matter

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

#### **Active Permits/Consent Orders**

Permit or	Date of	Permit Determinations or Amendments That		
Consent Order Number	Issuance	Affect the Permit (if any)		
R13-3394H	August 20, 2021			

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 an initial Tile V permit for Antero Midstream LLC's Middlebourne V Compressor Station. The following are the state rule and federal regulation determinations and justifications:

## 1. 45CSR2 - To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers

45CSR2 applies to fuel burning units, defined as equipment burning fuel "for the primary purpose of producing heat or power by indirect heat transfer". The reboilers (DREB1, DREB2, DREB3) and fuel conditioning heaters (FUEL1, FUEL2) are fuel burning units each with a design heat input under 10 million BTU/hr. Section 11.1 of the rule states that any fuel burning unit(s) having a heat input under ten (10) million B.T.U's per hour will be exempt from sections 4, 5, 6, 8 and 9. The reboilers, and heater treaters are subject to the 10 percent opacity limits required by section 3.1 of this rule. Compliance with the visible emission requirements shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 at the request of the Director.

#### 2. 45CSR6 - Control Air Pollution from Combustion of Refuse

This rule establishes emission standards for particulate matter and requirements for activities involving incineration of refuse.

The facility has three (3) thermal oxidizers (TO-1, TO-2, and TO-3) that are subject to the emission standards for particulate matter and opacity requirements set forth in section 4 of this rule. The opacity from these units shall not exceed 20 percent, except as provided by section 4.4. The allowable hourly particulate matter emissions are calculated using the following formula (Section 4.1):

Emissions (lb/hr) = F x Incinerator Capacity (tons/hr)

Where, the factor, F, is as indicated in Table I below:

**Table I:** Factor, F, for Determining Maximum Allowable Particulate Emissions.

Incinerator Capacity	Factor F	
A. Less than 15,000 lbs/hr	5.43	
B. 15,000 lbs/hr or greater	2.72	

The allowable Particulate Emissions from TO-1, TO-2 and TO-3 are as follows:

The allers alle	Dant:1-4-	Danianiana A	C TO 1	TO 2 1 TO	2 2	£ . 11
The allowable	Particulate	Emissions	irom 10-1.	. TO-Z and TO	.)5 are	as ionows:

Emission	Maximum Fuel Capacity	Feed to	Allowable Hourly	
Unit ID	(Waste Gas & Natural Gas)	Incinerator	PM Emissions	
	(scf/hr)*	(ton/hr)	(lb/hr)	
TO-1	20,830	0.58	3.15	
TO-2	20,830	0.58	3.15	
TO-3	20,830	0.58	3.15	

\*Note: Waste Gas & Natural Gas Density is based on 0.056 lb/ft<sup>3</sup>

Although the allowable Rule 6 hourly PM emission limits are 3.15 lb/hr for each thermal oxidizer, the actual hourly particulate matter emissions are negligible (0.005 lb/hr). Therefore, these units should demonstrate compliance with 45CSR§6-4.1 (hourly particulate matter limit) and 45CSR§6-4.3 (twenty-percent opacity requirement) by operating the thermal oxidizers with a flame present at all times (condition 5.1.3.b) and with no visible emissions (condition 5.1.3.f). The facility will demonstrate compliance with, conditions 5.1.3.b and 5.1.3.f by continuously monitoring the pilot flame of the thermal oxidizers and recording the times during all periods which the pilot flame was absent (conditions 5.2.1 and 5.4.1); and by conducting opacity tests to demonstrate that there are no visible emissions.

## 3. 45CSR13 - Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation

Permit R13-3394H was issued on August 20, 2021. The applicable requirements of Permit R13-3394H have been incorporated into the Title V permit. 40 CFR 60 Subpart JJJJ and 40 CFR 63 Subpart OOOOa have been revised. Therefore, where applicable, the requirements of permit R13-3394H from these subparts have been revised to the updated/new requirements of these subparts.

#### 4. 45CSR16 - Standards of Performance for New Stationary Sources

This rule establishes and adopts standards of performance for new stationary sources promulgated by the U.S. EPA pursuant to section 111(b) of the federal Clean Air Act, as amended.

The facility is subject to 40 CFR 60 Subpart JJJJ and Subpart OOOOa. See discussions for these rules below.

#### 5. 45CSR34 - Emission Standards for Hazardous Air Pollutants

This rule establishes and adopts a program of national emission standards for hazardous air pollutants and other regulatory requirements promulgated by the U.S. EPA pursuant to 40 CFR Part 61, 63 and section 112 of the federal Clean Air Act, as amended.

The facility is subject to 40 CFR 63 Subpart ZZZZ and Subpart HH. See discussions for these rules below.

## 6. 40CFR60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of 40 CFR §60.4230. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

Engines C-100 – C-1100 are Caterpillar G3608 compressor engines that are 4-stroke, lean burn, spark ignition RICE, manufactured after July 1, 2007. They are non-emergency engines rated at 2,500 HP each and are fueled by natural gas. All of the engines are equipped with oxidation catalysts. The engines must meet the emissions limits of 40 CFR 60.4233(e) and Table 1: NOx – 1.0 g/hp-hr (5.51 lb/hr); CO – 2.0 g/hp-hr (11.02 lb/hr); and VOC – 0.7 g/hp-hr (3.86 lb/hr). Based on the manufacturer's specifications for these engines, the emission standards will be met.

Engines C-1200 – C-1800 are Caterpillar G3608 compressor engines that are 4-stroke, lean burn, spark ignition RICE, manufactured after July 1, 2007. They are non-emergency engines rated at 2,675 HP each and are fueled by natural gas. All of the engines are equipped with oxidation catalysts. The engines must meet the emissions limits of 40 CFR 60.4233(e) and Table 1: NOx – 1.0 g/hp-hr (5.90 lb/hr); CO – 2.0 g/hp-hr (11.79 lb/hr); and VOC – 0.7 g/hp-hr (4.13 lb/hr). Based on the manufacturer's specifications for these engines, the emission standards will be met.

Engines GEN2 and GEN3 are PSI Industrial 21.9L generator engines that are 4-stroke, rich burn, spark ignition RICE, manufactured after July 1, 2007. They are non-emergency engines rated at 649 HP each and are fueled by natural gas. These engines are subject to the following emission limits: NOx – 1.0 g/hp-hr (1.43 lb/hr); CO – 2.0 g/hp-hr (2.86 lb/hr); and VOC – 0.7 g/hp-hr (1.00 lb/hr). Based on the manufacturer's specifications for these engines, the emission standards will be met. Antero provided the EPA Certification of Conformity for these engines. Therefore, as long as these engines are operated in a certified manner, performance testing is not required. Since the hourly and annual emission limits in condition 4.1.2 are the hourly limits from 40 CFR 60 Subpart JJJJ for 1,000 hours/year of operation, compliance with condition 4.1.2 will be demonstrated through compliance with 40 CFR 60 Subpart JJJJ and the maximum yearly hours of operation limit in condition 4.1.5.

Antero will demonstrate compliance with this subpart for the non-certified engines (C-100 – C-1800) in accordance with §60.4243(b)(2)(ii), which requires the facility to keep a maintenance plan and records of conducted maintenance and to maintain and operate the engines in a manner consistent with good air pollution control practices for minimizing emissions. Additionally, Antero has conducted the initial performance tests and is required to conduct subsequent compliance testing every 8,760 hours or three years, whichever comes first to demonstrate compliance with the emissions standards. Testing will be conducted in accordance with §60.4244.

Records of all notifications submitted to comply with this subpart, maintenance conducted on the engines, and performance testing will be maintained in accordance with §60.4245(a). Initial notifications have been submitted. Performance testing results will be reported as required in §60.4245(d).

Permit R13-3394H included several conditions from 40 CFR 60 Subpart JJJJ that were not applicable to the engines at the facility. For example, it included the 40 CFR 60 Subpart JJJJ requirements for engines less than 500 hp when all engines at the facility are greater than 500 hp. The Title V permit only includes 40 CFR 60 Subpart JJJJ requirements that are applicable to engines at the facility.

## 7. 40CFR60 Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

40 CFR 60 Subpart OOOOa establishes emission standards and compliance schedules for the control of the pollutant greenhouse gases (GHG). The greenhouse gas standard in this subpart is in the form of a limitation on emissions of methane from affected facilities in the crude oil and natural gas source category that commence construction, modification, or reconstruction after September 18, 2015. This subpart also establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO<sub>2</sub>) emissions from affected facilities in the crude oil

and natural gas source category that commence construction, modification or reconstruction after September 18, 2015:

a. Each gas well affected facility, which is a single natural gas well.

There are no gas wells at this facility. Therefore, all requirements regarding gas well affected facilities under 40 CFR 60 Subpart OOOOa do not apply.

 Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals.

There are no centrifugal compressors at the Middlebourne V Compressor Station. Therefore, all requirements regarding centrifugal compressors under 40 CFR 60 Subpart OOOOa do not apply.

c. Each reciprocating compressor affected facility, which is a single reciprocating compressor.

There are reciprocating compressors located at the Middlebourne V Compressor Station that were constructed after September 18, 2015. Therefore, the requirements regarding reciprocating compressors under 40 CFR 60 Subpart OOOOa do apply. There are no cover and closed vent systems for the reciprocating compressors. The facility will be required to perform the following:

- Replace the reciprocating compressor rod packing at least every 26,000 hours of operation or 36 months.
- Demonstrate initial compliance by continuously monitoring the number of hours of operation or track the number of months since the last rod packing replacement.
- Submit the appropriate start up notifications.
- Submit the initial annual report for the reciprocating compressors.
- Maintain records of hours of operation since last rod packing replacement, records of the date and time of each rod packing replacement, and records of deviations in cases where the reciprocating compressor was not operated in compliance.
- d. Each Pneumatic Controller
  - The Middlebourne V Compressor Station does not have any gas driven pneumatic controllers All pneumatic controllers are electric or compressed air driven. Therefore, all requirements regarding pneumatic controllers under 40 CFR 60 Subpart OOOOa do not apply.
- e. Each storage vessel affected facility, which is a single storage vessel with the potential for VOC emissions equal to or greater than 6 tpy.

The potential for VOC emissions must be calculated using a generally accepted model or calculation methodology, based on the maximum average daily throughput (as defined in 40 CFR 60.5430a) for a 30-day period of production prior to the applicable emission determination deadline specified in 40 CFR 60.5365a(e)(2). The determination may take into account requirements under a legally and practically enforceable limit in an operating permit or other requirement established under a federal or state authority. For each storage vessel affected facility that emits more than 6 tpy of VOC, the permittee must reduce VOC emissions by 95% or greater within 60 days of startup

The storage vessels located at the Middlebourne V Compressor Station are controlled by a VRU which reduces the potential to emit to less than 6 tpy of VOC. Permit R13-3394H provides legally and practically enforceable permit conditions that limit the VOC emissions. Therefore, Antero is not required by 40 CFR 60 Subpart OOOOa to further reduce VOC emissions. Antero is claiming a control efficiency of 98% for the VRU. In order to claim a control of 98%, Antero is required to meet additional design/function requirements. Antero will be required to perform three (3) of the following additional requirements:

- Additional sensing equipment.
- Properly designed bypass system
- Appropriate gas blanket.
- A compressor that is suitable and has the ability to vary the drive speed.
- f. The group of all equipment within a process unit at an onshore natural gas processing plant is an affected facility.

The Middlebourne V Compressor Station is not a natural gas processing plant. Therefore, Leak Detection and Repair (LDAR) requirements for onshore natural gas processing plants do not apply.

g. Sweetening units located at onshore natural gas processing plants that commenced construction, modification, or reconstruction after September 18, 2015, and on or before November 16, 2020, and sweetening units that commence construction, modification, or reconstruction after November 16, 2020.

The Middlebourne V Compressor Station is not a natural gas processing plant nor are there any sweetening units at the Middlebourne V Compressor Station. Therefore, all requirements regarding sweetening units under 40 CFR 60 Subpart OOOOa do not apply.

h. Each pneumatic pump affected facility:

The pneumatic pump requirements apply only to natural gas processing facilities and well sites. The Middlebourne V Compressor Station is not a natural gas processing plant nor a well site, therefore, all requirements regarding pneumatic pumps under 40 CFR 60 Subpart OOOOa do not apply.

i. The collection of fugitive emissions components at a compressor station, as defined in 40 CFR §60.5430a, is an affected facility.

The standard requires a source to establish a plan to monitor equipment leaks at compressor stations on a semiannually basis either using EPA Method 21 or an optical gas imaging camera. The standard requires detected leaks to be repaired within 30 days of detecting the leak. If the repair is technically infeasible, would require a vent blowdown or a compressor station shutdown, or would be unsafe to repair during operation of the unit, the repair or replacement must be completed during the next scheduled compressor station shutdown, after a planned vent blowdown or within 2 years, whichever is earlier.

The standard applies to any component that has the potential to emit fugitive emissions of methane or VOC at a compressor station, including but not limited to valves, connectors, pressure relief devices, open-ended lines, flanges, covers and closed vent systems not subject to 40 CFR §60.5411 or §60.5411a, thief hatches or other openings on a controlled storage vessel not subject

to 40 CFR §60.5395 or §60.5395a, compressors, instruments, and meters. Fugitive emissions are defined as any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 parts per million (ppm) or greater using Method 21 of appendix A-7 to 40 CFR Part 60.

The requirements of 40 CFR 60 Subpart OOOOa for monitoring fugitive emission are applicable to the Middlebourne V Compressor Station.

### 8. 40CFR63 Subpart HH - National Emissions Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities

This subpart applies to the owners and operators of the emission points, specified in paragraph (b) of 40 CFR §63.760 that are located at oil and natural gas production facilities that meet the specified criteria in paragraphs 40 CFR §§63.760(a)(1) and either (a)(2) or (a)(3) of §63.760. Per the definitions in §63.761, the Middlebourne V Compressor Station is considered a "production field facility" as it is before custody transfer (before a gas processing plant). Therefore, for major source determination for this subpart, only those HAP emissions from glycol dehydration and storage tanks shall be aggregated. Aggregating these HAPs results in the Middlebourne V Compressor Station being classified as an area source of HAP emissions under this subpart.

Because the facility is an area source of HAP emissions and the actual average emissions of benzene from each glycol dehydration unit process vent to the atmosphere is < 0.90 megagram per year (1.0 tpy), pursuant to 40 CFR §63.764(e)(1)(ii), the three (3) dehydration units (DEHY1, DEHY2 and DEHY3) are exempt from the requirements of this subpart except for the requirement to maintain records of the actual average benzene emissions per year as specified in 40 CFR §63.774(d)(1)(ii).

## 9. 40CFR63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Subpart ZZZZ establishes emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations. Under the Subpart ZZZZ definition of major source for production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination. Aggregating these HAPs results in the Middlebourne V Compressor Station being classified as an area source of HAP emissions under this subpart

The eighteen CAT G3608 compressor engines (C-100 – C-1800) and the two PSI Industrial 21.9L generator engines (GEN2 and GEN3) at the Middlebourne V Compressor Station are classified as new spark ignition engines located at an area source of HAP emissions. The engines must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR part 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for these engines under this subpart.

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

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

a. **45CSR10** - *To Prevent and Control Air Pollution From The Emission Of Sulfur Oxides*. This rule potentially applies to fuel burning units, including glycol dehydration unit reboilers and fuel gas heaters. Pursuant to 45CSR§10-10.1, units rated less than 10 MMBtu/hr are exempt from section 3 (SO<sub>2</sub> weight emission standards) and sections 6 through 8 (registration, permits, testing, monitoring,

recordkeeping, reporting) of the rule. However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date. The reboilers and fuel gas heaters at the station are each rated less than 10 MMBtu/hr and as such are exempt from aforementioned sections of 45CSR10.

- b. **45CSR21 -** *Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds.* The Middlebourne V Compressor Station is not located in Cabell, Kanawha, Putnam, Wayne, nor Wood counties.
- c. **45CSR27 -** *To Prevent and Control the Emissions of Toxic Air Pollutants.* Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment "used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight."
- d. 40 C.F.R 60 Subpart Db Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. This subpart applies to steam generating units greater than 100 MMBtu/hr. Middlebourne V Compressor Station does not have any steam generating units greater than 100 MMBtu/hr.
- e. **40** C.F.R **60** Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. This subpart applies to steam generating units greater than 10 MMBtu/hr and less than 100 MMBtu/hr. Middlebourne V Compressor Station does not have any steam generating units greater than 10 MMBtu/hr.
- f. 40 CFR 60 Subpart K Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. All tanks at the Middlebourne V Compressor Station commenced construction after May 19, 1978.
- g. 40 CFR 60 Subpart Ka Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984. All tanks at the Middlebourne V Compressor Station commenced construction after July 23, 1984.
- h. 40 CFR 60 Subpart Kb Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. Each tank potentially subject to this subpart has a design capacity less than 1,589.874 m³ and is used for petroleum or condensate stored prior to custody transfer. Therefore, per §60.110b(d)(4) this subpart does not apply.
- i. **40 CFR 60 Subpart GG -** *Standards of Performance for Stationary Gas Turbines*. There are no gas turbines at the Middlebourne V Compressor Station.
- j. 40 CFR 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. Middlebourne V Compressor Station is not a "Natural Gas Processing Plant" as defined in §60.631 and was constructed after August 23, 2011.
- k. 40 CFR 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. There are no sweetening units at the Middlebourne V Compressor Station.

- 1. **40** CFR **60** Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. All engines at Middlebourne V Compressor Station are spark ignition engines.
- m. **40** CFR **60** Subpart KKKK *Standards of Performance for Stationary Combustion Turbines*. There are no combustion turbines at the Middlebourne V Compressor Station.
- n. 40 CFR 60 Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced After August 23, 2011, and on or before September 18, 2015. The equipment at the Middlebourne V Station was installed after September 18, 2015. Therefore, 40 CFR 60 Subpart OOOO does not apply.
- o. 40 CFR 61 Subpart V National Emission Standard for Equipment Leaks (Fugitive Emission Sources). There are no sources as listed in §61.240(a) at the Middlebourne V Station that are intended to operate in volatile hazardous air pollutant service.
- p. 40 CFR 63 Subpart H National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks. There is no equipment or systems listed in 40 CFR §63.160(a) at the Middlebourne V Station that operate "in organic hazardous air pollutant service" as defined in 40 CFR §63.161.
- q. 40 CFR 63 Subpart VV National Emission Standards for Oil-Water Separators and Organic-Water Separators. The Middlebourne V Station is not subject to another subpart under 40 CFR Parts 60, 61, or 63 that reference this subpart.
- r. 40 CFR 63 Subpart HHH National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. The Middlebourne V Station transports natural gas prior to the point of custody transfer and therefore is not considered a part of the natural gas transmission and storage source category as described in 40 CFR §63.1270(a).
- s. 40 CFR 63 Subpart YYYY National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines. There are no stationary combustion turbines located at the Middlebourne V Station.
- t. 40 CFR 63 Subpart EEEE National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). The Middlebourne V Station is considered a "production field facility" as defined in §63.761 of 40 CFR 63 Subpart HH. Therefore per §63.2334(c)(1) it is not subject to this subpart.
- u. 40 C.F.R 63 Subpart DDDDD National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. This MACT standard applies to industrial, commercial, and institutional boilers and process heaters at major sources of HAPs. Middlebourne V Compressor Station is not major for HAPS.

#### **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 8, 2021 Ending Date: January 7, 2022

#### **Point of Contact**

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

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

#### **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

#### **Response to Comments (Statement of Basis)**

Not applicable.