

Fact Sheet



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

Permit Number: **R30-09500074-2025**

Application Received: **November 26, 2024**

Plant Identification Number: **03-54-09500074**

Permittee: **Antero Midstream LLC**

Facility Name: **Middlebourne III Compressor Station**

Mailing Address: **1615 Wynkoop Street
Denver, CO 80202**

Physical Location:	Wick, Tyler County, West Virginia
UTM Coordinates:	503.135 km Easting • 4363.005 km Northing • Zone 17
Directions:	From Wick, West Virginia, at the intersection of Hog Run Road and Wick Road, head east on Wick Road for 0.85 miles and turn left into the facility entrance.

Facility Description

The Middlebourne III Compressor Station separates, compresses, and dries gas off the inlet pipeline stream. The station includes twelve (12) compressor engines with oxidation catalysts, one (1) emergency generator, three (3) 150 MMscfd dehydrators with three (3) reboilers and three (3) flash tanks, three (3) 400-bbl condensate tanks, three (3) 400-bbl produced water tanks, one (1) 500-bbl settling tank, one (1) 0.5 MMBtu/hr fuel conditioning heater, one (1) flare, two (2) vapor recovery units (VRU), liquid loadout operations, fugitive component emissions, and six (6) auxiliary storage tanks.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2024 Actual Emissions
Carbon Monoxide (CO)	63.38	15.08
Nitrogen Oxides (NO _x)	160.3	110.56
Particulate Matter (PM _{2.5})	10.65	6.44
Particulate Matter (PM ₁₀)	10.65	6.61
Total Particulate Matter (TSP)	10.65	6.61
Sulfur Dioxide (SO ₂)	0.70	0.44
Volatile Organic Compounds (VOC)	183.8	102.31

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2024 Actual Emissions
Benzene	0.51	0.33
Toluene	0.58	0.44
Ethylbenzene	0.06	0.04
Xylenes	1.94	1.92
n-Hexane	5.46	3.57
Acetaldehyde	4.82	3.44
Acrolein	2.97	2.12
Methanol	1.44	1.03
Formaldehyde	6.24	5.42
Other HAPS	0.85	0.61
Total HAPs	24.87	18.92

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

Title V Program Applicability Basis

This facility has the potential to emit 183.8 tons per year of VOCs and 160.3 tons per year of NO_x. 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	Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers.
	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Construction permit.
	45CSR16	Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60.
	WV Code 22-5-4 (a) (15)	The Secretary can request any pertinent information such as 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 (SI ICE).
	40 C.F.R. Part 60, Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution 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 for Oil and Natural Gas Production Facilities.
	40 C.F.R. Part 63, Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines.
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR17	To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage And Other Sources Of Fugitive Particulate Matter

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

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

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-3347E	December 18, 2023	

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 the first Title V permit renewal for Antero Midstream LLC's Middlebourne III Compressor Station.

The changes made as a part of this renewal are as follows:

- **Section 3 – The Title V Boilerplate**
 - Conditions 3.1.6 and 3.3.1 were updated to the most recent version of the Title V Boilerplate.
- **Section 10.0**
 - Conditions 10.4.1, 10.5.1, and 10.5.2 were updated with revised language in 40 C.F.R. §60.4545(a), (c), and (d).
 - 40 C.F.R. §60.4245 parts (f) and (g) were added as conditions 10.5.3 and 10.5.4 respectively.
- **Section 11.0**
 - Conditions 11.1.1, 11.2.1, 11.2.2, 11.4.1, and 11.5.2, were updated with revised language from 40 C.F.R. 60 Subpart OOOOa.
- **Section 12.0**
 - Conditions 12.1.1, 12.2.1, 12.2.3, 12.4.1, 12.5.1, and 12.5.2 were updated with revised language from 40 C.F.R. 60 Subpart OOOOa.

Non-Applicability Determinations

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

45CSR10 - To Prevent and Control Air Pollution from the Emissions of Sulfur Oxides

The individual maximum design heat inputs of the reboilers (DREB1 – DREB3) and heater (FUEL1) are below 10 MMBTU/hr. Therefore, these units are exempt from sections 3 (weight emission standard), 6 (registration), 7 (permits), and 8 (testing, monitoring, recordkeeping, reporting) of 45CSR10 per 45CSR§10-10.1.

40CFR60 Subpart Kb - Standards of Performance for VOC Liquid Storage Vessels

40 C.F.R. 60 Subpart Kb does apply to storage vessels with a capacity greater than or equal to 75 cubic meters (19,812.9 gal). The Settling Tank (T04) is a 21,000 gallon tank. However, 40 C.F.R. 60 Subpart Kb does not apply to storage vessels that are used for petroleum or condensate storage prior to custody transfer per 40 C.F.R. §60.110b(d)(4).

40CFR60 Subpart KKK - Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants

40CFR60 Subpart KKK applies to onshore natural gas processing plants that commenced construction after January 20, 1984, and on or before August 23, 2011. The Middlebourne III Compressor Station is not a natural gas processing facility; therefore, the facility is not subject to this rule.

40CFR60 Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

40CFR60 Subpart KKKK applies to stationary combustion turbines (with heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour) that commenced construction, modification or reconstruction after February 18, 2005. 10 MMBtu per hour equals to 3,935 hp per hour, and the microturbine GEN1 at the Middlebourne III Compressor Station has design capacity of just 1,073 hp. Therefore, it is not subject to this subpart.

40 C.F.R. 64 (Compliance Assurance Monitoring (CAM))

None of the units at the facility have pre-controlled emissions above major source thresholds; therefore, CAM is not applicable to the facility.

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: August 20, 2025

Ending Date: September 19, 2025

Point of Contact

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

Nikki B. Moats
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/414-1282
Nikki.b.moats@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.