West Virginia Department of Environmental Protection Division of Air Quality

Fact Sheet



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

This Fact Sheet serves to address the changes specific to this Minor Modification and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on November 5, 2019.

Permit Number: **R30-05100125-2019**Application Received: **September 27, 2023**Plant Identification Number: **03-54-051-00125**

Permittee: MarkWest Liberty Midstream & Resources, L.L.C.

Facility Name: Majorsville Gas Plant

Mailing Address: 1515 Arapahoe Street, Tower 1, Suite 1600, Denver, CO 80202-2137

Permit Action Number: MM04 Revised: January 23, 2024

Physical Location: Dallas, Marshall County, West Virginia

UTM Coordinates: 540.95 km Easting • 4,423.83 km Northing • Zone 17

Directions: From Dallas, head south on Dallas Pike Road toward Dallas Street. Turn

right onto Number 2 Ridge Road (1.4 mi), turn left onto Warton Hill Road (341 ft), take the first right to stay on Warton Hill Road (2.6 mi), turn right onto Calis Majorsville Road (0.2 mi), destination is on the

right.

Facility Description

The permittee owns and operates the Majorsville Gas Plant. The facility has a capacity of 1,500 million standard cubic feet per day (mmscfd) of wet natural gas. The plant is used as a gathering station for gas wells throughout southwest Pennsylvania and West Virginia. Upon entering the plant, the gas is sent through a molecular sieve which is designed to remove liquids from the gas stream. Heaters are used to regenerate the molecular sieve on a regular basis to remove the water and hydrocarbons. After the molecular sieve, the gas will be cooled through a cryogenic plant with mechanical refrigeration which serves to remove propane and heavier hydrocarbons in the gas stream. The natural gas liquids from the new plant then pass through a stabilizer to remove any carryover methane and ethane in the liquid stream. The remaining gas stream (mostly methane and ethane) passes through the deethanizers, so that ethane can be separated and recovered from the gas stream. The ethane is then transferred via

pipeline to market. The remaining natural gas will pass through the existing compressor engines or one of the electric driven compressors prior to entering the downstream pipeline to market. Electric pumps are located on site to transfer the recovered liquids to another facility for disposal or further processing.

Emissions Summary

This modification results in the following emission changes:

Plantwide Emissions Changes [Tons per Year]		
Regulated Pollutants	Potential Emissions Increase	
Nitrogen Oxides (NO _x)	2.18	
Carbon Monoxide (CO)	9.94	
Volatile Organic Compounds (VOC)	6.13	
Total HAPs	0.23	

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 131.82 TPY of NOx, 131.78 TPY of CO, and 109.84 TPY of VOCs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, MarkWest Liberty Midstream & Resources L.L.C.'s Majorsville Gas Plant is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

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

45CSR13	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	
45CSR30	Requirements For Operating Permits	
State Only:	NA	

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

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

Active Permits/Consent Orders

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

Permit or	Date of	Permit Determinations or Amendments That
Consent Order Number	Issuance	Affect the Permit (if any)
R13-2818M	October 31, 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

The revisions made in association with this minor modification incorporate the revisions made in R13-2818M Class II Administrative Update which updates the flare maximum waste gas flow rate for source ID FL-1991 for an increase in operational flexibility. Several changes have also been made to the boilerplate of the permit which are not associated with the R13-2818M changes. The boilerplate revisions are a result of the revised Rule 30 (45CSR30), effective on March 31, 2023. Revisions to the Title V permit include the following:

1) Title V Boilerplate changes.

- > Condition 2.1.3. Revised to remove the word "such" and the Rule 30 citation from §2.12 to §2.39.
- Condition 2.17. Deleted and marked as "Reserved".
- ➤ Condition 3.5.4. Revised since the revised Rule 30 no longer requires the submittal of certified emissions statements.
- ➤ Condition 3.5.7. Deleted and marked as reserved.
- ➤ Condition 3.5.8.a.1. Deleted and marked as reserved.
- ➤ Condition 3.5.8.a.2. Revised to replace "telefax" with "email."
- 2) Page 1 (Permittee/Facility Information page) The page number has been corrected to be page 1 as opposed to page 2. All subsequent pages have been renumbered.
 - Added "Tower 1, Suite 1600," to the Permittee Mailing address.
- 3) Section 1.2. Active R13, R14, and R19 Permits Table Updated R13-2818L to R13-2818M and updated the date of issue.
- 4) **Section 6.0.**
 - Revised permit conditions 6.1.4 and 6.1.10.

Non-Applicability Determinations

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

None.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: Not Applicable for minor modifications.

Ending Date: N/A

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 57th Street SE
Charleston, WV 25304
304/414-1910
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.