

# Fact Sheet



## For Final 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: **December 21, 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: *MM05*      Revised: *May 15, 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 de-ethanizers, 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:

<b>Plantwide Emissions Changes [Tons per Year]</b>	
<b>Regulated Pollutants</b>	<b>Potential Emissions Change</b>
Nitrogen Oxides (NO <sub>x</sub> )	+0.06
Carbon Monoxide (CO)	-0.03
Volatile Organic Compounds (VOC)	+0.07
Sulfur Dioxide (SO <sub>2</sub> )	+0.05

**Title V Program Applicability Basis**

With the proposed changes associated with this modification, this facility maintains the potential to emit 131.88 TPY of NO<sub>x</sub>, 131.75 TPY of CO, and 109.91 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
45CSR16	Standards Of Performance For New Stationary Sources
45CSR30	Requirements For Operating Permits
45CSR34	Emission Standards for Hazardous Air Pollutants
40 C.F.R. Part 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
40 C.F.R. Part 63, Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

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 Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
R13-2818N	February 15, 2024	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

### Determinations and Justifications

The revisions made in association with this minor modification incorporate the revisions made in R13-2818N Class II Administrative Update which is for the replacement of one natural gas-fired emergency generator (M1-G-1) with one diesel-fired emergency generator (M1-G-12). Revisions to the Title V permit include the following:

#### 1) Section 1.1. – Emission Units Table

- Removed natural gas-fired emergency generator M1-G-1.
- Added diesel-fired emergency generator M1-G-12

#### 2) Section 1.2. - Active R13, R14, and R19 Permits Table - Updated R13-2818M to R13-2818N and updated the date of issue.

#### 3) Section 4.0.

- Section Title - Deleted “M1-G-1” and “21E” and added “M1-G-12” and “52E” to the title.
- Condition 4.1.5. - This condition contained limits for M1-G-1 and therefore has been deleted.
- Conditions 4.1.6., 4.1.7., 4.1.8., 4.1.9. – Renumbered these conditions as 4.1.5., 4.1.6., 4.1.7. and 4.1.8. due to the deletion of condition 4.1.5. Also updated the citation of authorities to reflect the renumbered conditions in R13-2818N.
- Condition 4.1.9. – This condition has been added to include the M1-G-12 emission limits from R13-2818N. (the previous condition 4.1.9. has been renumbered as 4.1.8 as mentioned above)
- Condition 4.1.10. – Deleted “M1-G-1” and added “M1-G-12.”

#### 4) Section 7.0.

- Deleted “M1-G-1” and “21E” from the section title. Also deleted the references to M1-G-1 throughout Section 7.0.
  - This section contains the requirements from 40 CFR 60 Subpart JJJJ for Spark ignition engines. M1-G-1 is being replaced with M1-G-12 which is a diesel-fired engine subject to the requirements of 40 CFR 60 Subpart IIII contained in Section 8.0 of the permit.

- Condition 7.1.4. – Although the requirements of this condition remain in R13-2818N, they are not applicable to the compressor engines C-102, C-103, and C-104 since these engines are neither emergency engines nor less than 500 HP. Therefore, condition 7.1.4. has been deleted from the Title V permit. Consequently, condition 7.1.5. has been renumbered as 7.1.4.
- Condition 7.1.5.b.1. (now 7.1.4.b.1. see above) – Although the requirements of this condition remain in R13-2818N, they are not applicable to the compressor engines C-102, C-103, and C-104 since these engines are greater than 500 HP. Therefore, condition 7.1.5.b.1. has been deleted from the Title V permit.
- Condition 7.1.6. – Although the requirements of this condition remain in R13-2818N, they are not applicable to the compressor engines C-102, C-103, and C-104 since these engines are not emergency engines. Therefore, condition 7.1.6. has been deleted from the Title V permit. Consequently, condition 7.1.7. has been renumbered as 7.1.5.
- Condition 7.3.2. – This condition contains the requirements from 40 CFR §60.4243(f) and is applicable to engines less than or equal to 500 HP. Since it was only applicable to M1-G-1 and compressor engines C-102, C-103, and C-104 are greater than 500 HP, condition 7.3.2. has been deleted from the permit.
- Condition 7.4.2. – Although the requirements of this condition remain in R13-2818N, they are not applicable to the compressor engines C-102, C-103, and C-104 since these engines are not emergency engines. Therefore, condition 7.4.2. has been deleted from the Title V permit.

#### 5) Section 8.0.

- Added “M1-G-12” and “52E” to the section title.
  - M1-G-12 emergency generator is a USEPA certified Tier III diesel-fired Stationary RICE engine rated at 198 HP (147.6 kW) and subject to 40 CFR 60 Subpart IIII. The Subpart IIII applicable requirements for M1-G-12 are already contained in Section 8 (except for the emission limits which were added as condition 8.1.1.e.) of the permit and therefore M1-G-12” and “52E” have been added to the section title.
  - The engine is also subject to 40 CFR 63 Subpart ZZZZ for an engine located at an area source of HAP emission. Pursuant to 40 CFR §§63.6590(c) and (c)(1), the engine must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII. The requirements of 40 CFR §§63.6590(c) and (c)(1) are in the existing permit condition 8.1.10.(2).
- Condition 8.1.1.e. – This condition was added to include the 40 CFR 60 Subpart IIII emission limits applicable to M1-G-12.
- Condition 8.1.3. – Updated the language as updated in the current version of 40 CFR §60.4207(b). Also updated the Citation of authority
- Condition 8.1.6. – Updated the language as updated in the current version 40 CFR §60.4211(a).
- Condition 8.1.8. – Updated the language as updated in the current version 40 CFR §60.4211(f).
- Condition 8.1.9.(2) – Added M1-G-12 to the Emission Unit ID list.
- Condition 8.3.5. – Updated the language as updated in the current version 40 CFR §60.4212(c) and added M1-G-12 to the emission unit ID list in the Citation of Authority.
- Condition 8.4.3. – Added M1-G-12 to the emission unit ID list in the Citation of Authority.

- Condition 8.5.2. – This condition has been added to include the reporting requirements of 40 CFR §60.4214(d).

### **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 57<sup>th</sup> 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.