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 July 16, 2018.

Permit Number: **R30-01700034-2018**
Application Received: **November 1, 2021**
Plant Identification Number: **017-00034**
Permittee: **MarkWest Liberty Midstream & Resources, L.L.C.**
Facility Name: **Sherwood Gas Plant**
Mailing Address: **1515 Arapahoe Street, Tower 1, Suite 1600; Denver, CO 80202-2137**

Permit Action Number: **MM02** Revised: **May 11, 2022**

Physical Location: West Union, Doddridge County, West Virginia
UTM Coordinates: 526.921 km Easting • 4,346.885 km Northing • Zone 17
Directions:
From Smithburg take US-50 east and go 2.8 miles, turn right at Co. Route 50/35 and go 0.1 miles, take the first right onto Blacklick Rd/Co Route 15/Sherwood-Greenbriar Rd and continue 0.4 miles. The site will be 0.5 miles west of Co Route 15.

Facility Description
The purpose of this modification is to incorporate federal consent decree (Civil Action No. 3:18-cv-02526) language into the Title V permit, increase NO\textsubscript{X} emission factor from 0.03 lb/MMBtu to 0.04 lb/MMBtu for the DeEthanizer HMO Heater (D1-H-782), and remove the annual heat input limits in Table 6.1.1. List Heaters.

Additionally, emissions associated with flares, blowdowns to atmosphere, rod packing venting, condensate and produced water tank and loadouts, and fugitives were revised based on recent gas composition data at the Sherwood Gas Plant.

These modifications were approved under R13-2914I.
Emissions Summary
This modification results in the following emission changes:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emissions (TPY)</th>
</tr>
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<tbody>
<tr>
<td>CO</td>
<td>-4.63</td>
</tr>
<tr>
<td>NO\textsubscript{X}</td>
<td>5.66</td>
</tr>
<tr>
<td>VOCs</td>
<td>1.65</td>
</tr>
<tr>
<td>Total HAPs</td>
<td>-0.10</td>
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</tbody>
</table>

Title V Program Applicability Basis
With the proposed changes associated with this modification, this facility maintains the potential to emit 156.81 TPY of CO and 156.90 TPY of NO\textsubscript{X}. Due to this facility’s potential to emit over 100 tons per year of criteria pollutant, MarkWest Liberty Midstream & Resources, 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.

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

<table>
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<tr>
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<tbody>
<tr>
<td></td>
<td>45CSR16</td>
<td>Operating permit requirement. Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units</td>
</tr>
<tr>
<td></td>
<td>45CSR30</td>
<td>Operating permit requirement. Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units</td>
</tr>
<tr>
<td>40 C.F.R. 60 Subpart Db</td>
<td>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</td>
<td></td>
</tr>
<tr>
<td>40 C.F.R. 60 Subpart Dc</td>
<td>Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015</td>
<td></td>
</tr>
<tr>
<td>40 C.F.R. 60 Subpart OOOO</td>
<td>Standards of Performance for Crude oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced on or Before September 18, 2015</td>
<td></td>
</tr>
<tr>
<td>40 C.F.R. 60 Subpart OOOOa</td>
<td>Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced Before September 18, 2015</td>
<td></td>
</tr>
</tbody>
</table>

State Only: N/A
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:

<table>
<thead>
<tr>
<th>Permit or Consent Order Number</th>
<th>Date of Issuance</th>
<th>Permit Determinations or Amendments That Affect the Permit (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R13-2914I</td>
<td>January 6, 2022</td>
<td></td>
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</tbody>
</table>

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 modification required changes in the following sections: Section 1.0, Section 3.0, Section 5.0, Section 6.0, Section 7.0, Section 8.0, Section 9.0, and the addition of Section 10.0.

- **Section 1.0**
  - The Emission Units table was updated to reflect the changes made in R13-2914I.
  - Table 1.2 was updated since R13-2914I supersedes and replaces R13-2914H.

- **Section 3.0**
  - Condition 3.2.2 was updated since conditions 5.1.2.c and 5.1.3.f.4 were both deleted.

- **Section 5.0**
  - Permit conditions 5.1.1, 5.1.2, and 5.1.3 were all updated to reflect the changes made in R13-2914I.

- **Section 6.0**
  - Permit conditions 6.1.1, 6.1.2, 6.1.3, and 6.1.6 were updated to reflect the changes made in R13-2914I.
  - D1-H-782, H-10768, and H-768 were included in the list of sources subject to condition 6.1.4 since they are considered fuel burning units under 45CSR2 and 45CSR10.

- **Section 7.0**
  - Condition 7.1.1 was updated with the VOC emission limit in R13-2914I.
• **Section 8.0**
  
  o Permit Condition 8.1.3 was updated to reflect the changes made in R13-2914I.

• **Section 9.0**
  
  o The Citations for conditions 9.1.2, 9.1.3, and 9.1.4 were changed because the R13-2914I removed 9.1.1 and changed the numbering of the other conditions.

• **Section 10.0**
  
  o The addition of condition 10.1.1 was at the permittee’s request. The facility’s 40 CFR 60 Subparts OOOO and OOOOa requirements are included in Section 8 LDAR requirements and Section 4 for rod packing of the compressors.

  o Conditions 10.1.1-10.1.3 are R13-2914I permit conditions that were added to this section.

  o Permit conditions 10.1.4 and 10.1.5 of R13-2914I incorporated 40 CFR 60 Subparts Db and Dc by reference and are the applicable requirements of these subparts are expanded throughout section 10.0.

  o Emission Point D1-H-782 (DeEthanizer HMO Process Heater) is subject to 40 CFR 60 Subpart Db for Steam Generating Units because its design capacity is 119.2 MMBtu/hr. D1-H-782 only burns natural gas.

  o Emission Points H-771, H-10768, H-768 are subject to 40 CFR 60 Subpart Dc for Steam Generating Units because their design capacities are all between 10 and 100 MMBtu/hr. These units only burn natural gas.

**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**

<table>
<thead>
<tr>
<th>Beginning Date:</th>
<th>Not Applicable for minor modifications.</th>
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<tbody>
<tr>
<td>Ending Date:</td>
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</tbody>
</table>
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  
304/926-0499 ext. 41282  
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.