

# 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 10, 2015.

Permit Number: **R30-05100141-2015(MM01)**  
Application Received: **June 13, 2016**  
Plant Identification Number: **03-54-051-00141**  
Permittee: **Williams Ohio Valley Midstream LLC**  
Facility Name: **Moundsville Fractionation Plant**  
Mailing Address: **100 Teletech Drive, Suite 2, Moundsville, WV 26041**

Permit Action Number: *MM01*    Revised: *June 9, 2017*

---

Physical Location:                      Moundsville, Marshall County, West Virginia  
UTM Coordinates:                      517.35 km Easting • 4,418.11 km Northing • Zone 17  
Directions:                                From Moundsville, take State WV-2/Lafayette Avenue South, then West, approximately 2 miles. Site is on the right, at the site of the former Olin Facility in Round Bottom.

---

### Facility Description

The permittee currently operates a 42,500 barrel per day (bpd) natural gas liquids (NGLs) fractionation facility and loading terminal located along State Route 2 in Marshall County approximately two (2) miles south of Moundsville. The process and equipment associated with this operation are referred to as Fractionation Train 1 (Frac 1) and Fractionation Train 2 (Frac 2) with combined capacity of 58,200 bpd. The facility is characterized by NAICS and SIC codes 211112 and 1321, respectively.

The Moundsville Fractionation Plant receives NGL and processes it through a series of distillation processes (de-propanizer and de-butanizer towers) to generate three (3) products: propane, mixed butanes and heavier weight organics identified as natural gasoline. The fractionation plant consists of a series of distillation processes where propane and then mixed butanes are removed from the NGL. The remaining liquid is classified as "natural gasoline". The incoming NGL is accumulated in a series of pressure vessels.

The primary purpose of these tanks is to act as a buffer for variations in the rate of NGL receipt to ensure a steady flow rate through the process, and providing plant storage. Frac 2 is also capable of loading either NGL as received or all of the products into rail cars and trucks for shipment to markets through the existing and new rail and truck loading equipment. The three (3) products will be accumulated in a series of pressure vessels.

There are two (2) 89.85 MMBtu/hr and one (1) 45.54 MMBtu/hr natural gas fired heaters that will heat fluid that is used at various locations throughout the facility to control the temperature within certain process equipment.

This modification is to increase the component counts for Process and Piping Fugitives and to modify the size and number of pressurized storage tanks.

**Emissions Summary**

The follow table shows the change in emissions as a result of this modification.

<b>Pollutnat</b>	<b>Pre-Modification<sup>(1)</sup></b>	<b>Post-Modification</b>	<b>Change</b>
VOCs	216.59	215.53	-1.06
Total HAPs	11.62	14.61	+2.99
n-Hexane	9.40	11.82	+2.42

(1) Emission taken from R13-2892D Engineering Evaluation/Factsheet

**Title V Program Applicability Basis**

With the proposed changes associated with this modification, this facility maintains the potential to emit 146.38 tpy CO, 215.53 tpy VOCs, and 11.82 tpy n-Hexane. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, and over 10 tons per year of a single HAP, Williams Ohio Valley 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.

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

Federal and State:	45CSR13	Permits for construction/modification
	45CSR30	Operating permit requirement.
	45CSR34	Emission standards for HAPs
	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.
State Only:	None.	

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> )
R13-2892E	March 21, 2017	
G60-C069	March 31, 2015	

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 following changes were made during this modification:

#### 1.1. Emission Units

- Changed the Emission Point ID of Emission Unit 1S to Fugitives.
- Updated the installation date and size of some of the butane accumulation tanks of Emission Unit 3S.
- Updated the installation date of the 90,000-gallon natural gasoline accumulation tank of Emission Unit 3S.
- Added two 140,000 gallon natural gasoline accumulation tanks to emission unit 3S.

#### 3.0. Facility-Wide Requirements

- Removed and reserved condition 3.1.9 since the underlying R13 condition no longer exists.
- Updated the boiler plate language in conditions 3.5.3, 3.5.5, and 3.5.6.
- Removed 40 C.F.R. 63 Subparts HH and DDDDD from the permit shield since, with the increase in n-Hexane emissions, the facility is now a major source of HAPs and is potentially subject to both subparts.

#### 4.0. Hot Oil Heaters 1-HTR and 2-HTR

- 1-HTR and 2-HTR are classified as "Existing Gas 1 Units." According to §63.7490(b), a process heater is new if it commenced construction after June 4, 2010 and the applicability criteria were met at the time construction commenced. Although each natural gas heater commenced construction after June 4, 2010, the facility was not a major HAP source at the time of heater construction, therefore the heaters are "existing" per §63.7490(d). The facility became a major source on October 19, 2015 with the issuance of Permit R13-2892D.

- Added condition 4.1.13 which is condition 10.1 from the R13 permit and requires the facility to meet all applicable requirements for a major source of HAPs as given under 40 C.F.R. 63 Subpart DDDDD.
- The following conditions contain the applicable requirements of 40 C.F.R. 63 Subpart DDDDD: 4.1.14 – 4.1.21, 4.4.6 – 4.4.8 , and 4.5.3 – 4.5.10.

#### 6.0. 40 C.F.R. 60 Subpart OOOO Requirements, Gas Processing Plants

- Updated the VOC emission limit in condition 6.1.3 to reflect changes made in permit R13-2892E.

#### 7.0. Emergency Generator EG-1 (6S)

- Made a change to the citation of condition 7.1.2. since this engine is now located at a major source of HAPs instead of an area source of HAPs.

### **Non-Applicability Determinations**

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

40 C.F.R. 60 Subpart KKK – Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants. 40 C.F.R. 60 Subpart KKK applies to onshore natural gas processing plants that commenced construction after January 20, 1984 and on or before August 23, 2011. Moundsville Fractionation Plant was constructed after August 23, 2011. Williams Ohio Valley Midstream is required to meet all applicable requirements of 40 C.F.R. 60 Subpart OOOO for natural gas processing facilities.

40 C.F.R. 60 Subpart OOOOa – Standards of performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015. According to Williams Ohio Valley Midstream, the components contributing to the revised fugitive emissions rate calculated as part of this modification were not constructed or modified after September 18, 2015.

### **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:

Robert Mullins  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: 304/926-0499 ext. 1243 • Fax: 304/926-0478  
Robert.A.Mullins@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)**

Comments from Williams Ohio Valley Midstream, LLC received by email on May 26, 2017.

Section 9.0 of the permit addresses source-specific requirements under NESHAP Subpart HH and Condition 9.5.1 requires periodic reports to be submitted semi-annually. After review of the federal regulations, it is OVM's position that periodic reporting under NESHAP Subpart HH is not required based on the following information. As periodic reporting under NESHAP HH is not required, Condition 9.5.1 should be revised to show "none".

The affected sources under NESHAP Subpart HH for major HAP sources are:

- i. Each glycol dehydration unit
- ii. Each storage vessel with the potential for flash emissions;
- iii. The group of all ancillary equipment, except compressors, intended to operate in volatile hazardous air pollutant service (as defined in §63.761), which are located at natural gas processing plants; and
- iv. Compressors intended to operate in volatile hazardous air pollutant service (as defined in §63.761), which are located at natural gas processing plants.

The only potentially affected sources at Moundsville Fractionation Plant are ancillary equipment in VHAP service. There are no "storage vessels with the potential for flash emissions" as each natural gasoline storage tank (Emission Units V-2950 and V-2951) has an annual average throughput less than 79,500 liters per day (500 bbl/day). Note the Title V operating permit application shows each tank having a throughput of 4,630,286 gallons per year or 302 bbl/day. Furthermore, there are no glycol dehydration units or compressors operating in VHAP service at the facility.

NESHAP HH at §63.769(b) states "This section does not apply to ancillary equipment and compressors for which the owner or operator is subject to and controlled under the requirements specified in subpart H of this part; or is subject to and controlled under the requirements specified in 40 CFR part 60, subpart OOOO. Ancillary equipment and compressors subject to and controlled under 40 CFR part 60, subpart OOOO shall submit the periodic reports specified in §63.775(e)." Details of the NESHAP HH periodic reports are outlined in §63.775(e) and all reports required under NESHAP HH are outlined in §63.775(b). Note, however, §63.775(b)(8) states "Each owner or operator of ancillary equipment and compressors subject to this subpart that are exempt from the control requirements for equipment leaks in §63.769, are exempt from all reporting requirements for major sources in this subpart, for that equipment." As ancillary equipment and compressors at Moundsville Fractionation Plant are exempt from the control requirements in §63.769 (because the ancillary equipment are subject to and controlled under 40 CFR Part 60, Subpart OOOO), the equipment leak standards under §63.769 do not apply and periodic reports are not required.

NESHAP Subpart HH at §63.766(d), Storage vessel standards, states "This section does not apply to storage vessels for which the owner or operator is subject to and controlled under the requirements specified in 40 CFR part 60, subparts Kb or OOOO; or is subject to and controlled under the requirements specified under 40 CFR part 63 subparts G or CC. Storage vessels subject to and controlled under 40 CFR part 60, subpart OOOO shall submit the periodic reports specified in §63.775(e)." As discussed above,

there are no “storage vessels with the potential for flash emissions” at Moundsville Fractionation Plant such that §63.766 does not apply and periodic reports are not required.

DAQ Response

It was agreed that based on the information supplied with the comment that the facility was not subject to the periodic reporting requirements in condition 9.5.1. Therefore, Section 9.0 was removed.