

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 October 30, 2017.

Permit Number: **R30-04900052-2017**
Application Received: **February 12, 2019**
Plant Identification Number: **049-00052**
Permittee: **Equitrans, L. P.**
Facility Name: **Curtisville #50 Compressor Station**
Mailing Address: **625 Liberty Avenue, Suite 1700; Pittsburgh, PA 15222**

Permit Action Number: *MM01* Revised: *September 30, 2019*

Physical Location:	Mannington District, Marion County, West Virginia
UTM Coordinates:	549.65 km Easting • 4377.15 km Northing • Zone 17
Directions:	I-79N to the Downtown Fairmont Exit (Number 137). Bear right on off ramp and merge into left lane prior to stop light. Make left at stop light and stay on Route 310 for 3 stop lights. Make right turn onto bridge at 3 rd light. Go up the hill at stop light after crossing bridge. Go thru 2 nd stop light. Make a left at next stop light. Bear to the right-hand lane for two stop lights and make a right onto Route 250 North. Stay on Route 250N to Mannington. In Mannington after passing Rite Aid (on right), make left turn onto Market street. At the Y at the end of Market Street, bear right onto Buffalo Road and continue on this road past Mannington Fairgrounds into Logansport. After leaving Logansport make a left turn onto a two-lane bridge (1 st left after Logansport) to Owen-Davey Creek Road. The 1 st right turn leads to the station.

Facility Description

The Curtisville Compressor Station #50 is a natural gas transmission facility covered by NAICS 486210 and SIC 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per

day. The station consists of one (1) 1100-hp natural gas internal combustion reciprocating engine, one (1) 44-hp emergency generator, one (1) 125-hp electric generator, one (1) heating boiler, one (1) TEG dehydrator, one (1) TEG dehydration reboiler, one (1) enclosed combustor, and four (4) tanks of various sizes. The Curtisville #50 Compressor Station is used to compress storage gas.

The purpose of this modification is to replace the existing dehydrator, flare, and dehydrator reboiler with new equipment. Additionally, this modification incorporates new permit R13-3441.

Emissions Summary

Plantwide Emission Changes Summary [Tons per Year]	
Regulated Pollutants	Potential Emissions Increase
Carbon Monoxide (CO)	2.35
Nitrogen Oxides (NO _x)	2.79
Particulate Matter (PM ₁₀)	0.21
Sulfur Dioxide (SO ₂)	0.02
Volatile Organic Compounds (VOC)	0.92
<i>PM₁₀ is a component of TSP.</i>	
Hazardous Air Pollutants	Potential Emissions Increase
Total HAPs	0.50

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 133.43 TPY of NO_x. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Equitrans, L.P. 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:	45CSR2	To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers
	45CSR6	Open burning prohibited
	45CSR10	SO _x emissions.
	45CSR13	NSR permit.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 64	Compliance Assurance Monitoring

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>)
R13-3441	April 26, 2019	

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

Equipment Changes

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Equipment Being Removed					
Dehy	Dehy Flare	TEG Dehydrator	1972	35.0 MMCFD	Dehy Flare
Dehy Flare	Dehy Flare	Dehydration Flare F1500 Model No: 44X1339	1990	0.08 MMBTU/hr	None
BLR02	BLR02	Dehydrator Boiler	1993	0.35 MMCF/hr	Dehy Flare
New Equipment Being Installed					
Dehy2	Dehy Combustor	TEG Dehydration Unit	2019	60 MMSCFD	Dehy Combustor
Dehy Combustor	Dehy Combustor	Enclosed Combustor	2019	6.0 MMBTU/hr	N/A
BLR03	BLR03	TEG Dehydration Reboiler	2019	1.54 MMBTU/hr	None

Note: all references in this permit to a "flare" were changed to "combustor" to reflect the equipment changes made with this modification.

Compliance Assurance Monitoring (CAM)

The new Triethylene Glycol Dehydration Unit (Dehy2) has pre-controlled potential emissions that exceed major source thresholds for volatile organic compounds (VOC) and hazardous air pollutants (HAPs), and is equipped with an enclosed combustor used to comply with federally-enforceable emission limits associated with the dehydration operation. Therefore, Dehy2 represents two pollutant specific emissions units (PSEUs), one for volatile organic compounds (VOC) and one for hazardous air pollutants (HAPs).

This permit contained CAM language for the previously installed dehydration unit, and the permittee has stated that the new dehydration unit will be subject to the same CAM requirements. Therefore, the current general CAM language has been left in the permit. The only changes were to change all references to a "flare" to reference a "combustor".

R13-3441

This new NSR permit was written to address equipment changes made with this modification. This permit contains federally enforceable permit conditions for the TEG Dehydration Unit, Combustor, and Reboiler. Previous versions of the Title V permit contained language intended to serve as federally enforceable requirements for the old dehydration unit and boiler in the absence of NSR permit requirements. With the installation of new equipment and the approval of R13-3441, these old permit conditions are now obsolete and were removed from this permit. The permit conditions being removed are as follows:

Old Title V Permit Condition	Summary of Permit Condition	Regulatory Citation
5.1.3.	Flare Compliance Assessment	45CSR§30-5.1.c.
5.1.11.	Monitoring, Testing, and Reporting for Area Source Status	40CFR§63.10(b)(3)
5.2.2.	Closed Vent System	45CSR§30-5.1.c.
5.2.3.	Compliance with 45CSR§6-4.1 Hourly PM Emission Limit ¹	45CSR§30-5.1.c.
5.2.4.	Compliance with 45CSR§6-4.1 Hourly PM Emission Limit ¹	45CSR§30-5.1.c, 45CSR§6-4.1.
5.2.5.	Monitoring of Actual Annual Operating Parameters	45CSR§30-5.1.c.
5.3.2.	Flare Design Evaluation	45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)
5.3.3.	Flare Compliance Assessment	45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)
5.3.4.	Determine Composition of Wet Natural Gas	45CSR§30-5.1.c
5.4.2.	Record of Flare Design Evaluation	45CSR§30-5.1.c.
5.4.3.	Records of Testing for Flare Compliance Assessment	45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)
5.4.5.	Records of Visible Emissions Opacity Tests	45CSR§30-5.1.c.
5.4.6.	Records of Monitoring Data, Wet Gas Sampling, and Annual GLYCalc Emission Estimates	45CSR§30-5.1.c.
5.5.2.	Submission of Testing Protocol	45CSR§30-5.1.c.
5.5.4.	Deviations Reporting	45CSR§30-5.1.c
5.5.6.	Emission Summary Incorporating West Gas Testing Results	45CSR§30-5.1.c

¹According to the fact sheet for R13-3441, the enclosed combustor is subject to 45CSR§6-4.1. The combustor has negligible hourly particulate matter emissions (annual PM emissions are 0.18 TPY). Therefore, this unit should demonstrate compliance with this section's limit of 0.695 lb/hr.

Note: the removal of these permit conditions and the addition of new conditions (see discussion later in this fact sheet) resulted in the renumbering of permit conditions throughout section 5.0 of this permit. The remaining tables in this fact sheet use the new permit condition numbers when referring to this Title V permit.

Several permit conditions in R13-3441 were already included in the previous version of this Title V permit, and the following permit conditions were revised to reference the applicable R13-3441 permit condition:

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3441 Condition
3.4.1.	Records of Monitoring Information	N/A	4.1.1.
5.1.1.	Area Source of HAPs	N/A	4.1.2.
5.1.7.	No Visible Emissions	45CSR§6-4.5	5.1.4.
5.1.8.	No Objectionable Odors	45CSR§6-4.6	5.1.4.
5.1.12.	10% Opacity Limit	45CSR§2-3.1	6.1.2.
5.4.1.	Records of Pilot Flame Absence	45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)	5.4.1.
5.4.2.	Records of Monitoring and Testing	45CSR§30-5.1.c.	5.4.3.
5.5.3.	Visible Emissions Deviations Reporting	45CSR§30-5.1.c.	5.5.1. and 6.5.1.

Some existing permit conditions were revised due to the equipment changes in this modification. These revised conditions are summarized below:

Title V Permit Condition	Summary of Revised Permit Condition/Revision	Regulatory Citation	R13-3441 Condition
5.1.2.	Design and Operation of Combustor (Replaces Old Flare Requirements)	N/A	5.1.2.
5.1.4.	New Combustor PM Emission Limit	45CSR§6-4.1.	5.1.4.
5.1.9.	Maximum Throughput of New TEG Dehydration Unit/Still Column (Dehy2)	N/A	5.1.1.
5.2.1.	Combustor Pilot Flame	45CSR§30-5.1.c., 40 C.F.R. § 64.6 (c)	5.2.1.
5.3.1.	Visible Emissions Checks and/or Opacity Monitoring for New Combustor	N/A	5.3.1.

Several conditions in R13-3441 were incorporated into this Title V Permit Modification as new permit conditions. These new conditions are summarized below:

New Title V Permit Condition	Summary of New Permit Condition	Regulatory Citation	R13-3441 Condition
3.1.10.	Operation and Maintenance of Air Pollution Control Equipment	N/A	4.1.3.
3.4.4.	Record of Malfunctions of Air Pollution Control Equipment	N/A	4.1.4.
5.1.3.	Opacity Limits	45CSR§§6-4.3 and 4.4	5.1.4.
5.1.10.	Maximum Design Heat Input for Dehy Combustor and BLR3	N/A	5.1.3. and 6.1.1.
5.1.11.	Maximum Emissions from Dehy Combustor	N/A	5.1.5.
5.2.2.	Monitor Throughput of Dry Natural Gas Fed to Dehydration System	N/A	5.2.2.
5.2.3.	Method 9 Observations	N/A	6.2.1.
5.2.4.	Compliance with Pilot Flame Requirements	N/A	5.2.3.
5.3.2.	Method 22 Opacity Tests	N/A	5.3.2.
5.3.3.	Demonstrate Compliance with HAP Emissions Thresholds Using GLYCalc Version 3.0 or Higher	N/A	5.3.3.
5.3.4.	Opacity Monitoring	45CSR§2-3.2.	6.3.1.
5.4.4.	Records of Testing Conducted Per 5.3.2.	N/A	5.4.2.
5.4.5.	Records of Visible Emissions Opacity Tests Per 5.3.1.	N/A	5.4.4.
5.4.6.	Records of all PTE HAP Calculations	N/A	5.4.5.
5.4.7.	Record of Dry Natural Gas Throughput	N/A	5.4.6.
5.4.8.	Maintenance of Records	N/A	5.4.7.
5.4.9.	Records of All Monitoring Data Per Condition 5.2.3.	N/A	6.4.1.
5.5.2.	Reporting of Bypass Events	N/A	5.5.2.
5.5.5.	Reporting Nonoperation of Enclosed Combustion Device	N/A	5.5.3.

Non-Applicability Determinations

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

- **40CFR63 Subpart HHH** (National Emission Standards for Hazardous Air Pollutants for Oil and Natural Gas Transmission and Storage Facilities): subpart HHH establishes national emission limitations and operating limitations for HAPs emitted from oil and natural gas transmission and storage facilities located at major sources of HAP emissions. The Curtisville #50 Compressor Station is not a major source of HAPs, therefore, Equitrans is not subject to this rule.

- **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 Curtisville #50 Compressor Station is not a natural gas processing facility therefore, Equitrans is not subject to this rule.

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: N/A
Ending Date: N/A

Point of Contact

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

Rex Compston, P.E.
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1209 • Fax: 304/926-0478
Rex.E.Compston@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.