

# Fact Sheet



*For Final Renewal Permitting Action Under 45CSR30 and  
Title V of the Clean Air Act*

Permit Number: **R30-04900052-2007**

Application Received: **May 15, 2002**

Plant Identification Number: **03-54-049-00052**

Permittee: **Equitrans, L. P.**

Facility Name: **Curtisville #50 Compressor Station**

Mailing Address: **100 Allegheny Center Mall, Pittsburgh, PA 15212-5331**

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Physical Location:

Mannington District, Marion County, West Virginia

UTM Coordinates:

549.65 km Easting • 4377.15 km Northing • Zone 17

Directions:

Interstate 79 North to the Downtown Fairmont Exit (Number 137). Bear to the 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 3rd light. Go up the hill at stop light after crossing bridge. Go thru 2nd 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 hand 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 the community of Logansport. After leaving Logansport make a left hand turn onto a new two lane bridge (1st left after Logansport) to Owen-Davey Creek Road. The first right turn leads to the station.

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## Facility Description

The Curtisville Compressor Station #50 is a natural gas transmission facility covered by NAICS 48210 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) 70-hp electric generator, one (1) heating boiler, one (1) hot water tank, one (1) dehydrator boiler, one (1) dehydrator flare, and two (2) tanks of various sizes. The Curtisville #50 CS is used to compress storage gas.

## Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2006 Actual Emissions
Carbon Monoxide (CO)	16.6442	1.4636
Nitrogen Oxides (NO <sub>x</sub> )	128.9290	11.7072
Particulate Matter (PM <sub>10</sub> )	1.5795	0.1816
Total Particulate Matter (TSP)	2.0448	0.1816
Sulfur Dioxide (SO <sub>2</sub> )	0.0316	0.0025
Volatile Organic Compounds (VOC)	21.4224	0.4490
<i>PM<sub>10</sub> is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2006 Actual Emissions
Benzene	0.4084	0.0077
Ethyl Benzene	0.6591	0.00
Formaldehyde	2.7525	0.2214
Hexane	0.1214	0.0011
Naphthalene	0.0039	0.0001
Toluene	4.1118	0.0047
Xylenes	8.1322	0.0034
Total	16.1893	0.2384
<i>Some of the above HAPs may be counted as PM or VOCs.</i>		

## Title V Program Applicability Basis

This facility has the potential to emit 148.92 tons per year of NO<sub>x</sub>. 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.

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	To Prevent and Control Particulate Air Pollution from the Emissions of Sulfur Dioxides
	45CSR11	Standby plans for emergency episodes.
	45CSR13	New Source Review permits for stationary sources
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45 CSR17	To Prevent and Control Particulate Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft 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, 45CSR15, 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> )
R30-10300033-1996	July 23, 1997	CO-R30-E-2002-53
CO-R30-E-2002-53	December 12, 2002	

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 B," which may be downloaded from DAQ's website.

## **Determinations and Justifications**

The only change to the July 23, 1997 Title V Permit was a consent order. The consent order required the company to submit a Title V Renewal Application and allowed them to operate under the terms and conditions of the original Title V permit.

A determination was made that 45CSR10 does not apply to engines and compressors. Since the heating boiler and the dehydrator boiler are less than 10 MMBtu/hr, they are exempt from sulfur dioxide weight emission standards for fuel burning units, registration, permits, testing, monitoring, and recordkeeping, 45CSR§§10-3, 6 through 8. The Curtisville facility does not refine or process gas streams, therefore, it is not subject to 45CSR§10-5. Also, since the Curtisville facility is not a manufacturing process, it is not subject to 45CSR§10-4.

The 1.25 MMBtu/hr heating and 0.35 MMBtu/hr dehydrator boilers are exempt from monitoring and testing under 45CSR2 and 45CSR2A since they are fueled by natural gas. Since the design heat input of the heater and boilers are less than 10 MMBtu/hr, they are not subject to 45CSR2A, per 45CSR§2A-3.1. According to 45CSR§2-11.1, the heater and boilers are also exempt from Sections 45CSR§§2-4, 5, 6, 8 and 9; Weight Emission Standards, Control of Fugitive Particulate Matter, Registration, Testing, Monitoring, Recordkeeping and Reporting, and Start-ups, Shutdowns and Malfunctions, respectively. The Director reserves the right to require testing pursuant to 45CSR§§ 2-8.1.b and 2-8.1.c.

### **40 CFR part 63 Subpart HHH**

Federally and Practically Enforceable requirements for the Dehydrator Facilities have been added to the Title V Permit, Sections 5.1, 5.2, 5.3, 5.4, and 5.5.2 through 5.5.4. The dehydration units can be exempt (Section 5.1.3.) from Subpart HHH in accordance with 40 C.F.R. § 63.1274 (d) (2) by limiting the benzene emissions through a NSR permit or by taking a limit via 45CSR§30-12.7. The owner or operator must monitor actual average benzene emissions in accordance with 40 C.F.R. § 63.1282 (a) (2), which require the use of GLYCalc Version 3.0 or higher (Section 5.1.3.). However, Sections 5.2.1, 5.3.1, and 5.5.2 require the use of GLYCalc Version 4.0 or higher, therefore the monitoring requirement of 40 C.F.R. § 63.1282 (a) (2) was streamlined with Condition 5.3.1 of the Title V Permit. The owner or operator must maintain records of the benzene emissions in accordance with 40 C.F.R. § 63.1284 (d).

### **40 CFR 64 - Compliance Assurance Monitoring (CAM)**

Triethylene Glycol Dehydration (Dehy) has pre-controlled potential emissions that exceed major source thresholds for volatile organic compounds (VOC) and hazardous air pollutants (HAPs), and is equipped with a flare that is used to comply with federally-enforceable emission limits associated with the dehydration operation. Therefore, the Dehy represents two pollutant specific emissions units (PSEUs), one for volatile organic compounds (VOC) and one for hazardous air pollutants (HAPs). Since one control device is common to both PSEUs, one monitoring plan was submitted in accordance with 40 C.F.R. § 64.4 (f). The submitted plan meets the requirements of the CAM rule for the Dehy Flare controlling VOCs and HAPs from the dehydration unit.

Monitoring per the CAM Plan for VOC and HAPs emissions will be as follows:

		Indicator No. 1
<b>I.</b>	<b>Indicator</b>	Presence of Flame (permit condition 5.1.2.d.)
	<b>Monitoring Approach</b>	Use of thermocouple, infrared device, or equivalent (permit condition 5.2.1.).
<b>II.</b>	<b>Indicator Range or Designated Condition</b>	Indicator provides data regarding presence or absence of flame.
<b>III.</b>	<b>Performance Criteria</b>	A thermocouple, infrared detector, pilot eye, or equivalent device will be installed to continuously monitor the presence of a pilot flame (permit condition 5.2.1.).
	<b>A. Data Representativeness</b>	A thermocouple, infrared detector, pilot eye, or equivalent device will be installed to continuously monitor the presence of a pilot flame (permit condition 5.2.1.).
	<b>B. Verification of Operational Status</b>	All manufacturer's recommendations regarding periodic testing/checks for the proper installation and operation of the pilot eye device will be followed (permit condition 5.3.3.).
	<b>C. QA/QC Practices and Criteria</b>	For the device that detects the presence of a flame, calibration, maintenance and operation will be conducted in accordance with manufacturer's specifications (permit condition 5.3.2.).
	<b>D. Monitoring Frequency</b>	Continuously
	<b>Data Collection Procedures</b>	Records of all flame outs or loss of pilot eye, along with any applicable corrective actions will be documented and maintained (permit condition 5.4.1. and 5.5.1.).
	<b>Data averaging periods</b>	No averaging periods

### Non-Applicability Determinations

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

45CSR21	Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds. Curtisville #50 station is not located in Cabell, Kanawha, Putnam, Wayne, or Wood counties that are affected by 45CSR21.
45CSR27	To Prevent and Control the Emissions of Toxic Air Pollutants. Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment "used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight."
40 C.F.R. 60 Subpart GG	Standards of Performance for Stationary Gas Turbines. There are no turbines at the Curtisville #50 Compressor Station.
40 C.F.R. 60 Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. All tanks are below 40,000 gallons in capacity.
40 C.F.R. 60 Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984. All tanks are below 40,000 gallons in capacity.
40 C.F.R. 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. All tanks storing volatile organic liquids are below 75 m <sup>3</sup> in capacity.

40 C.F.R. 60 Subpart KKK	Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants. Curtisville #50 Compressor Station is not engaged in the extraction of natural gas from field gas or in the fractionation of mixed natural gas liquids to natural gas products.
40 C.F.R. 60 Subpart LLL	Standards of Performance for Onshore Natural Gas Processing: SO <sub>2</sub> Emissions. There are no sweetening units at the Curtisville #50 Compressor Station.
40 C.F.R. 60 Subpart KKKK	Standards of Performance for Stationary Combustion Turbines. There are no turbines at the Curtisville #50 Compressor Station.
40 CFR 63 Subpart HH	National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities. The Curtisville #50 Compressor Station is not subject to Subpart HH since Curtisville #50 Compressor Station is not a natural gas production facility.
40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). The Curtisville #50 Compressor Station is not subject to RICE since the station is not major source of HAPs.

### 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: September 6, 2007  
Ending Date: October 9, 2007

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

Wayne Green  
Title V Permit Writer  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

### 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.

## **Point of Contact**

Wayne Green  
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. 1258 • Fax: 304/926-0478

## **Response to Comments (Statement of Basis)**

Because of a typographical error, citation changes were made to Sections 4.5.1, 5.1.1, 5.1.2, and 5.1.9. The citation now read 45CSR§§30-12.7 instead of 45CSR30-12.7.c.

Citation additions to include CAM are:

1. 40 C.F.R. § 64.6 (c) and § 64.7 (d) to Section 5.2.1
2. 40 C.F.R. § 64.6 (c) to Sections 5.3.2, 5.3.3, 5.4.1, 5.4.3, and 5.4.7
3. 40 C.F.R. § 64.7 (d) to Section 5.5.1

Section 5.4.9 was included for general recordkeeping requirements for CAM - 40 C.F.R. § 64.9 (b).

Section 5.5.5 was included for general reporting requirements for CAM - 40 C.F.R. § 64.9 (a) (2).

CAM Plan Summary of Requirements table for Dehydration Flare (Dehy Flare) was added as Section 5.7.