

Fact Sheet



For Draft/Proposed Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-01700001-2013**

Application Received: **June 26, 2012**

Plant Identification Number: **017-00001**

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

Facility Name: **West Union Compressor Station #53**

Mailing Address: **550 Eagan Street, Charleston, WV 25301**

Physical Location:	West Union, Doddridge County, West Virginia
UTM Coordinates:	516.0 km Easting • 4353.0 km Northing • Zone 17
Directions:	From Fairmont, take Interstate 79 south to the Clarksburg exit. Go to the end of ramp to stop sign and turn right onto U.S. Route 50 west. Follow U.S. Route 50 west approximately 25 miles. Make a right turn onto WV Route 18 north. Go approximately 5 miles and West Union station is on the right.

Facility Description

West Union Compressor Station #53 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 three (3) 1080-hp natural gas internal combustion reciprocating engines, one (1) heating boiler, two (2) electric generators, one (1) dehydration unit with one (1) flare and one (1) dehydration unit with a thermal oxidizer, and seven (7) storage tanks 7,500 gallons or less containing oil, ambientrol, triethylene glycol, and pipeline condensates, separately.

There have been no changes to the existing equipment since the last permit renewal.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions¹	2011 Actual Emissions²
Carbon Monoxide (CO)	106.00	60.33
Nitrogen Oxides (NO _x)	477.76	334.83
Particulate Matter (PM ₁₀)	1.33	0.91
Total Particulate Matter (TSP)	1.33	0.91
Sulfur Dioxide (SO ₂)	0.08	0.05
Volatile Organic Compounds (VOC)	16.11	14.67

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions¹	2011 Actual Emissions²
Formaldehyde	6.01	4.25
Total HAPs	8.86	8.22

Some of the above HAPs may be counted as PM or VOCs

¹ Potential emissions were calculated by Equitrans based on new site-specific information. Changes in potential emissions between the 2007 and 2012 renewals are based on these new calculation methods and not physical modifications or changes in the method of operation. For compressor engines C-001, C-002, and C-003, Equitrans discovered that these engines are 4SLB engines and not 4SRB engines as previously believed. The PTEs for C-001, C-002, and C-003 have been recalculated based on AP-42 emission factors for 4SLB engines.

The PTE for generators G-001 and G-002 were previously calculated using AP-42 emission factors for external combustion of natural gas rather than AP-42 emission factors for 4SRB internal combustion engines. Also, the brake-specific fuel consumption factors for G-001 and G-002 have been updated. The PTEs for G-001 and G-002 have been recalculated based on the AP-42 emission factors for 4SRB engines and the revised brake-specific fuel consumption.

In addition, the heating value of natural gas was revised from 1020 BTU/scf to 1050 BTU/scf based upon recent site-specific gas analysis data.

² Actual emissions submitted by e-mail dated December 18, 2012. These emissions vary from those reported in the 2012 Certified Emission Statement which were not calculated using the new site-specific information.

Title V Program Applicability Basis

This facility has the potential to emit 477.76 tons per year of Nitrogen Oxides and 106 tons per year of Carbon Monoxide. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, Equitrans, L.P.'s West Union Compressor Station #53 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 45CSR6 45CSR10 45CSR11 45CSR13 WV Code § 22-5-4 (a) (14) 45CSR30 40 C.F.R. Part 61 40 C.F.R. Part 63, Subpart HH 40 C.F.R. Part 63, Subpart ZZZZ 40 C.F.R. 64 40 C.F.R. Part 82, Subpart F	PM limits for Indirect Heat Exchangers Open burning prohibited. Sulfur Dioxide limits. Standby plans for emergency episodes. New source construction permit. The Secretary can request any pertinent information such as annual emission inventory reporting. Operating permit requirement. Asbestos inspection and removal Natural gas Production MACT RICE MACT Compliance Assurance monitoring (CAM) Ozone depleting substances
State Only:	45CSR4	No objectionable odors.

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>)
R13-2565A	01/23/2007	

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

This renewal addresses the following changes made to the most recently issued Title V permit:

1. Section 7.0 – A new section is added for 40 C.F.R. 63 Subpart ZZZZ requirements for 3 engines at the facility.

3 engines [C-001, C-002 & C-003] are SI existing stationary 4SLB engines > 500 HP Located at an area source of HAPs, constructed before June 12, 2006. Following are the 40 C.F.R. 63 Subpart ZZZZ requirements for these engines:
 Compliance date is October 19, 2013.

Emission Limitations: 40 C.F.R. §63.6603, Table 2d.

Operating Limitations: 40 C.F.R. §63.6603, Table 2b. Permittee is complying with this MACT using oxidation catalyst, hence only conditions using oxidation catalyst are listed in the permit.

Fuel Requirements: No Requirements

Performance Tests: 40 C.F.R. §§63.6612, 63.6615, 63.6620, Tables 3, 4 & 5.

Monitoring, Installation, Collection, Operation and Maintenance Requirements: 40 C.F.R. §§63.6625(a), (b) and (h).

Initial Compliance: 40 C.F.R. §63.6630, Table 5.

Continuous Compliance: 40 C.F.R. §§63.6605, 63.6635, 63.6640, and Table 6.

Notification Requirements: 40 C.F.R. §63.6645.

Recordkeeping Requirements: 40 C.F.R. §63.6655, except §§63.6655 (c), (e) and (f).

Reporting Requirements: 40 C.F.R. §63.6650, except §63.6650 (g).

General Provisions (40 CFR part 63) - Table 8.

2.0. Section 8.0 – A new section is added for 40 C.F.R. 63 Subpart ZZZZ requirements for 2 generators at the facility.

2 engines [G-001 and G-002] are SI existing non-emergency stationary 4SRB engines \leq 500 HP located at an area source of HAPs, constructed before June 12, 2006. Following are the 40 C.F.R. 63 Subpart ZZZZ requirements for these engines:

Compliance date is October 19, 2013.

Emission Limitations: 40 C.F.R. §63.6603, Table 2d

Operating Limitations: No Requirements

Fuel Requirements: No Requirements

Performance Tests: No Requirements

Monitoring, Installation, Collection, Operation and Maintenance Requirements: 40 C.F.R. §§63.6625(e), (h) and (j)

Initial Compliance: No Requirements

Continuous Compliance: 40 C.F.R. §§63.6605, 63.6640

Notification Requirements: No Requirements

Recordkeeping Requirements: 40 C.F.R. §63.6655, except §§63.6655 (c) & (f)

Reporting Requirements: No Requirements

General Provisions (40 CFR part 63) - Table 8: Yes, except per 40 C.F.R. §63.6645(a) (5), the following do not apply: 40 C.F.R. §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h).

3.0. 40 CFR 64 – Compliance Assurance Monitoring (CAM)

This is the second renewal of the facility. CAM plans for the flare (in section 5.0) and thermal oxidizer (in section 6.0) were addressed in the last renewal. The following sections are added to the permit to supplement the CAM plan: sections 5.2.5, 5.2.6, 5.4.3 and 5.5.2 to add 40 C.F.R. §§64.7(b) to (e), 64.8, 64.9(a) and (b) for the flare CAM plan; sections 6.2.7, 6.2.8, 6.4.10 and 6.5.3 to add 40 C.F.R. §§64.7(b) to (e), 64.8, 64.9(a) and (b) for the thermal oxidizer CAM plan.

4.0. According to section 6.3.2 of the permit, the thermal oxidizer was tested by the permittee on March 6, 2012. The test result was 99.95% destruction efficiency compared to permit requirement of 98% destruction efficiency from condition 6.1.10. There were three test runs, oxidizer combustion temperature was between 1502 to 1510 deg F which was more than the minimum temperature of 1400 deg F required by section 6.2.4 of the permit.

5.0. 40 CFR 63, Subpart HH Area Source Requirements – Dehy#2 dehydrates the gas coming into the facility. Dehydrated gas is transmitted to a nearby Natural Gas Processing Plant and then the processed gas from Natural Gas Processing Plant comes back to the reservoir. According to the definition of “Facility” in 40 C.F.R. §63.761, Dehy#2 is subject to Natural gas Production MACT (40 C.F.R. 63 Subpart HH). Existing and previous Title V permits and R13-2565A stated that Dehy#2 is subject to Natural gas Transmission MACT (40 C.F.R. 63 Subpart HHH), which was a mistake.

The facility is a minor source of HAPs and has benzene emissions less than 1 ton per year. The GACT requirements of 40 CFR63 Subpart HH and associated requirements for maintaining area source status for Dehy#2 are included in permit conditions 6.1.13, 6.1.16 through 6.1.19, 6.2.2, 6.3.3, 6.3.4, 6.4.8, 6.4.9 & 6.5.2. Conditions 6.2.2 & 6.4.8 in the existing Title V permit are revised because Dehy#2 is not subject to 40 C.F.R. 63 Subpart HHH.

Dehy#1 processes transmission gas as stated in the existing permit. However, it is not subject to 40 C.F.R. 63 Subpart HHH because the facility is an area source.

6.0. In Section 1.1, Emission Units table: An entry is added for Dehy#1 which was missing in the existing permit. Tank 2 is added for Pipeline Condensate Tank – this tank does not have any applicable requirements.

7.0. Section 5.1.7 – benzene exemption language is replaced with maintaining area source status below 10 tons of any individual HAP or 25 tons of aggregate HAPs per year in accordance with 40 C.F.R. 63 subpart HHH because the benzene exemption only has a regulatory basis if the source is a major HAP source subject to HHH (this source is not a major source of HAPs). Therefore the regulatory driver is to maintain area source status below 10/25 tpy in accordance with HHH, which counts all transmission dehyds and engines within the transmission source category.

Because of the above, sections 5.2.2 and 5.4.1 were revised to reflect monitoring and recordkeeping for complying with area source status. Also sections 5.3.1 and 5.5.1 were added for testing the wet natural gas and reporting emissions to show compliance.

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 Dc – *Boiler NSPS* - The boilers at West Union station are below 10 mmBtu/hr.

40 C.F.R. 60 Subparts K, Ka – *Standards of Performance for Storage Vessels for Petroleum Liquids* - All tanks at West Union station are less than 40,000 gallons in capacity.

40 C.F.R. 60 Subpart Kb - *Standards of Performance for Volatile Organic Liquid Storage Vessels* - All tanks at West Union station are below 75 m³ in capacity.

40 C.F.R. 60 Subpart KKK – *Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant* - West Union station is not engaged in the extraction of natural gas liquids 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: SO₂ Emissions* - There are no sweetening units at West Union station.

40 C.F.R. 60 Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* - The engines at West Union Station are not stationary compression ignition (CI) internal combustion engines (ICE).

40 C.F.R. 60 Subpart JJJJ – *Stationary Spark Ignition Internal Combustion Engines*

This subpart applies to manufacturers, owners, and operators of stationary spark ignition internal combustion engines (ICE) that have been constructed, reconstructed, or modified after various dates, the earliest of which is June 12, 2006. All of the spark ignition ICE engines at the West Union Station, including emergency generators, were installed prior to 2006 (latest installation date is 1974) and have not been modified or reconstructed, and therefore the requirements of this subpart do not apply.

40 C.F.R. 60 Subpart OOOO – *Oil and Natural Gas Production, Transmission, And Distribution*

This subpart applies to affected facilities that have been constructed, reconstructed, or modified after August 23, 2011. All emission units at the West Union Station, including tanks, were installed prior to August 23, 2011 and have not been modified or reconstructed, and therefore the requirements of this subpart do not apply.

40 C.F.R. 63 Subpart DDDDD – *Industrial, Commercial, and Institutional Boilers and Process Heaters*

This MACT standard applies to industrial, commercial, and institutional boilers and process heaters of various sizes and fuel types at major sources of HAP emissions. The West Union Station is an area source of HAP emissions. Therefore, this subpart is not applicable.

40 C.F.R. 63 Subpart JJJJJ – *Industrial, Commercial, and Institutional Boilers*

This MACT standard applies to industrial, commercial, and institutional boilers at area sources of HAP. All boilers at the West Union Station fire natural gas exclusively. Natural gas fired boilers are exempt from the rule per 40 C.F.R. §63.11195(e). Therefore, this rule is not applicable to boilers at the West Union Station.

There are no Greenhouse Gas Clean Air Act requirements for this facility because the facility has not made any changes that triggered a PSD permit modification.

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: February 12, 2013
Ending Date: March 14, 2013

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

U.K.Bachhawat
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th 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

U.K.Bachhawat
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1256 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Not applicable.