

Fact Sheet



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

Permit Number: **R30-01700001-2007**

Application Received: **May 10, 2002**

Plant Identification Number: **017-00001**

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

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

Mailing Address: **225 North Shore Drive Pittsburgh, PA 15212**

Physical Location: West Union, Doddridge County, West Virginia
UTM Coordinates: 516.00 km Easting • 4,353 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 Standard Industrial Classification (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) 1800-hp natural gas internal combustion reciprocating engines, one (1) heating boiler, one (1) hot water tank, two (2) electric generators, one (1) dehydration unit with one (1) flare and one (1) dehydration unit with a thermal oxidizer, and fourteen (14) storage tanks 20,000 gallons or less containing oil, ambient air, triethylene glycol, and pipeline condensates, separately.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2006 Actual Emissions
Carbon Monoxide (CO)	41.01	28.97
Nitrogen Oxides (NO _x)	241.66	158.69
Particulate Matter (PM ₁₀) <i>PM₁₀ is a component of TSP.</i>	1.11	0.742

Total Particulate Matter (TSP)	2.20	0.742
Sulfur Dioxide (SO ₂)	0.11	0.046
Volatile Organic Compounds (VOC)	16.18	3.55
Hazardous Air Pollutants	Potential Emissions	2006 Actual Emissions
Single HAPs	<10	<10
Aggregate HAPs	<25	1.772

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

Title V Program Applicability Basis

This facility has the potential to emit 241.66 tons per year of Nitrogen Oxides. 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	PM limits for Indirect Heat Exchangers
	45CSR6	Open burning prohibited.
	45CSR10	Sulfur Dioxide limits.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	NSR Permit for Dehy #2 & Thermal Oxidizer
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 64	Compliance Assurance Monitoring
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.

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 request any pertinent information such as annual emission inventory reporting is provided in WV Code § 22-5-4(a)(14). 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 (if any)
R13-2565A	January 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.

Determinations and Justifications

This is a renewal of the Title V permit. The following are changes that were made since the original Title V Permit was issued:

45CSR2 - The requirements to conduct and maintain records of visible emissions testing for the indirect heat exchangers were removed in accordance with 45CSR§2A-3.1.a., which exempts natural gas combustion sources from such testing and recordkeeping. The dehydration unit would be subject to 45CSR2, however the only emission point is the flare, which is subject to 45CSR6.

45CSR10 - The WVDEP has determined that 45CSR10 is not applicable to engines, therefore the requirements to analyze the inlet gas stream for total sulfur and H₂S to demonstrate compliance with 45CSR10 were removed. The dehy units, flare and thermal oxidizer are exempt from 45CSR§10-4.1. in accordance with 45CSR§10-4.1.e. Pipeline quality natural gas has very low sulfur content, and total sulfur includes H₂S, therefore it is no longer required to analyze the inlet gas stream for H₂S for the dehy, dehy flare, TEG dehydration reboiler, and thermal oxidizer to demonstrate compliance with 45CSR10.

45CSR13 - The facility was issued a New Source Review Permit modification, Permit R13-2565A, to replace the thermal oxidizer and Dehy #2. For Dehy #2, Permit R13-2565A specified that HAPs emissions from the dehy unit will not exceed 10 tons per year (tpy) of any single HAP, or 25 tpy of total HAPs. However, to be considered a minor source for HAPs, the limits must be less than 10 tpy single HAPs and 25 tpy total HAPs. The condition was revised to less than 10 tpy /25 tpy in accordance with 45CSR§30-12.7. Permit R13-2565A required visible emissions testing to demonstrate compliance with its requirements and it was determined that this level of monitoring, recordkeeping and reporting (MRR) was not sufficient for Title V purposes. In accordance with 45CSR§30-5.1.c., additional MRR was added to the Title V permit as follows:

For Dehy #2, Permit R13-2565A limited the amount of wet gas processed through the dehy unit. A requirement was added to the Title V permit to maintain records of the amount of wet gas processed and the hours of operation of Dehy #2. The CAM Plan submitted by the permittee will be used to demonstrate compliance with the requirement to not exceed the HAPs emission limits.

For the Dehy #2 reboiler, Permit R13-2565A limited the natural gas consumption and specified emission limits for criteria pollutants. The criteria pollutant emission limits were calculated based on maximum natural gas consumption, therefore compliance with the limits will be demonstrated by monitoring natural gas consumption. A requirement was added to the Title V permit to maintain records of the hourly fuel consumption and operating hours of the Dehy #2 reboiler on a monthly basis.

For the thermal oxidizer, Permit R13-2565A limited the natural gas consumption and specified emission limits for VOC and HAPs. A requirement was added to the Title V permit to monitor and keep records of the gas consumption and hours of operation of the Dehy #2 thermal oxidizer on a monthly basis. The CAM Plan submitted by the permittee will be used to demonstrate compliance with the requirement to not exceed the VOC and HAPs emission limits.

40 CFR part 63 Subpart HHH - 40 CFR §63.1274(d)(2) exempts sources if the actual average benzene emissions from the glycol dehydration unit process vents are less than 1.0 ton/yr. In order to make these benzene limits federally enforceable, Equitrans has requested that the Title V permit include a limit for Benzene emissions for the Dehy #2 thermal oxidizer in accordance with 45CSR§30-12.7.

40 CFR 64 - Compliance Assurance Monitoring (CAM) - The engines, generators, boilers and storage tanks do not have control devices and are not subject to CAM in accordance with 40 CFR §64.2(a)(2).

The Dehy and Dehy #2 have pre-controlled potential emissions that exceed major source thresholds for volatile organic compounds (VOC) and hazardous air pollutants (HAPs). The Dehy is equipped with a flare that is used to comply with federally-enforceable emission limits associated with the dehy operation. Dehy #2 is equipped with a thermal oxidizer to comply with federally-enforceable emissions limits associated with the dehy operation. Therefore, the Dehy and Dehy #2 each represent two pollutant specific emissions units (PSEUs), one for volatile organic compounds (VOC) and one for hazardous air pollutants (HAPs). Since each control device (Flare and Thermal Oxidizer) is common to both pollutants (VOCs and HAPs), one monitoring plan for each control device was submitted in accordance with 40 CFR §64.4(f). The submitted plans meet the requirements of the CAM rule for the dehy flare and for Dehy #2 thermal oxidizer controlling VOCs and HAPs.

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

Dehy and flare		Indicator No. 1	Indicator No. 2
I.	Indicator	Visible emissions (permit condition 5.1.2.)	Presence of Flame (permit condition 5.1.7.)
	Monitoring Approach	Monitor visible emissions on a monthly basis (permit condition 5.2.1.)	Use of device capable of detecting presence of flame (permit condition 5.2.3.)
II.	Indicator Range or Designated Condition	No visible emissions.	Presence or absence of flame indicates whether Dehy #1 is operating properly.
III.	Performance Criteria	Visible emission observations will be monitored according to EPA Method 22. If visible emissions are observed, compliance shall be determined using EPA Method 9 and taking corrective action. (permit condition 5.2.1.)	A pilot flame detecting device (e.g. infrared, thermocouple, etc.) will be utilized to continuously monitor the presence of a pilot flame and will sound an alarm if no flame is detected (permit condition 5.2.3.)
	A. Data Representativeness		
	B. Verification of Operational Status	N/A	N/A. Pilot flame detecting device is not new or modified so not necessary to verify operational status.
	C. QA/QC Practices and Criteria	N/A. No equipment to verify status and condition.	For the device that detects the presence of a flame, calibration, maintenance and operation will be conducted in accordance with manufacturer's specifications. The flare will be maintained in accordance with 40 C.F.R. § 60.18 (permit condition 5.2.4.)
	D. Monitoring Frequency	Once per month (permit condition 5.2.1.)	Continuously (permit condition 5.2.3.)
	Data Collection Procedures	The following data will be maintained: The presence or absence of visible emissions; Method 9 Visual Emissions Evaluation of Opacity (if emissions are detected); Any maintenance or repairs performed as a result of these inspections including date, time, and name of person performing repairs (permit condition 5.4.2.)	The following data will be maintained: Any corrective action taken in response to an indicator showing noncompliance; Flare inspections; Any time the flare is not operating; Any internal inspections performed; Any maintenance or repairs performed as a result of these inspections including date, time, and name of person performing repairs (permit condition 5.4.2.).
	Data averaging periods	No averaging periods.	No averaging periods.

Monitoring per the CAM Plan for Dehy #2 for VOC and HAPs emissions will be as follows:

Dehy #2 and thermal oxidizer		Indicator No. 1	Indicator No. 2	Indicator No. 3
I.	Indicator	Thermal Oxidizer operating temperature (permit condition 6.2.3.)	Closed Vent System inspection (permit condition 6.2.5.)	Performance Test (permit condition 6.3.2.)
	Monitoring Approach	Measure temperature in the combustion chamber (permit condition 6.2.3.)	Visually inspect the closed vent system piping and any by-passes for leaks (permit condition 6.2.5.)	Conduct performance testing to demonstrate compliance with 98% minimum VOC/HAP destruction efficiency
II.	Indicator Range or Designated Condition	Normal operating range is 1400°F - 1600°F. An excursion is defined as any finding of temperature (when controlling process emissions) below the minimum temperature of 1400°F (or other minimum temperature demonstrated during the most recent performance test). ¹ (permit condition 6.2.4.)	An excursion is defined as any finding of visible, audible, or olfactory indications of leaks. ²	An excursion is defined as any test result that indicates less than 98% VOC/HAP destruction efficiency.
III.	Performance Criteria	The temperature recorder shall be accurate to within 1% of the temperature being measured, or ±1°C, whichever is greater. (permit condition 6.4.6.)	N/A	EPA Test Methods (or other methods approved by DEP) will be followed (permit condition 6.3.2.)
	A. Data Representativeness			
	B. Verification of Operational Status	N/A	N/A	N/A
	C. QA/QC Practices and Criteria	The temperature recorder shall be calibrated in accordance with manufacturer's specifications (permit condition 6.2.6.)	N/A	N/A
	D. Monitoring Frequency	Manually on an hourly basis or continuously using electronic media (permit condition 6.2.3.)	Monthly (permit condition 6.2.5.)	Every 5 years (permit condition 6.3.2.)
	Data Collection Procedures	The following data will be maintained: Records of combustion chamber temperatures (permit condition 6.4.6.)	Inspection logs will be maintained. (permit condition 6.4.7.)	Test protocols and reports will be maintained (permit condition 6.3.2.)
	Data averaging periods	3 hours.	N/A	N/A

¹Equitable proposes to use a minimum temperature of 1400°F (per manufacturer estimates), or to establish the minimum required operating temperature of the thermal oxidizer necessary to meet 98% VOC/HAP destruction efficiency during required performance testing as outlined in the conditions of the permit.

²Equitable is proposing to conduct inspections of the closed vent system for visible, audible, or olfactory indications of leaks, consistent with requirements for monitoring of equipment leaks of VOC and HAP under various NSPS (e.g., Subpart VV 60.482-10(f)(1)(ii)) and NESHAP (e.g., Subpart V 61.242-11(f)(1)(ii), Subpart SS 63.983(b)(1)(i)(B), and many others) standards for closed vent systems and control devices.

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 Subparts K, Ka	<i>Standards of Performance for Storage Vessels for Petroleum Liquids.</i> All tanks at West Union station are below 40,000 gallons in capacity.
40 C.F.R. 60 Subpart Kb	<i>Standards of Performance for Volatile Organic Liquid Storage Vessels.</i> Tanks 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, and 15 are below 75 m ³ gallons in capacity.
40 C.F.R. 60 Subpart KKK	<i>Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants.</i> 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.

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: November 13, 2007
Ending Date: December 13, 2007

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

Bobbie Scroggie
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

Bobbie Scroggie
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1225 • Fax: 304/926-0478

Response to Comments

Not applicable.