

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 9, 2015.

Permit Number: **R30-05100127-2015**
Application Received: **June 21, 2017**
Plant Identification Number: **03-054-05100127**
Permittee: **Williams Ohio Valley Midstream LLC**
Facility Name: **Fort Beeler Gas Processing Plant**
Mailing Address: **100 Teletech Drive, Suite 2, Moundsville, WV 26041**

Permit Action Number: *MM01* Revised: *October 3, 2017*

Physical Location: Cameron, Marshall County, West Virginia
UTM Coordinates: 535.00 km Easting • 4,414.33 km Northing • Zone 17
Directions: From Main Street in Cameron head north on US-250/Waynesburg Pike
 ~3.7 miles. Turn left to continue on US-250 ~2.5 miles. Turn left onto
 access road ~0.2 mile. Entrance to site is straight ahead.

Facility Description

The **Fort Beeler Gas Processing Plant** currently receives natural gas from local production wells and processes this gas through cryogenic processes, removing natural gas liquids from the inlet gas. The facility has the capacity to process 520 million standard cubic feet per day (mmscfd) of raw natural gas through one (1) 120 mmscfd cryogenic plant (Plant 1), and two (2) 200 mmscfd cryogenic plants (Plant 2 and Plant 3).

The co-located **Groves Dehydration Station** utilizes one 5.0 million standard cubic feet per day (mmscfd) triethylene glycol (TEG) dehydrator. The dehydrator is comprised of a contactor/absorber tower (no vented emissions), a flash tank, and a regenerator/still vent. The dehydrator removes water vapor from the inlet wet gas stream to meet pipeline specifications. Other equipment is: one (1) 0.20 MMBTU/hr glycol (TEG)

reboiler (BLR-01) to supply heat for the TEG regenerator/still vent, as well as several comparatively small tanks with insignificant emissions for glycol and methanol storage.

This modification covers changes made in both R13-2826J and R13-2826K. The changes associated with R13-2826J are to:

1. Increase the annual amount of waste gases combusted in the “new” flare.
2. Add process piping fugitives to the Emission Units Table.
3. Remove requirements for Storage Tanks T-01 and T-02.
4. Revise potential fugitive emissions generated based on updated gas analysis data and updated protocols for determining emissions of speciated HAPs.

The changes associated with R13-2826K are to:

1. Revise emissions from the new process flare (FL-02).
2. Revise various facility VOC/HAP emissions to reflect a smaller safety factor.
3. Remove the now obsolete old process flare (FL-01).
4. Increase the fugitive VOC/HAP emissions from component leaks by updating the facility component count.

Emissions Summary

The following changes in this facility’s Potential to Emit (PTE) are associated with this modification:

Pollutant	Change in PTE (TPY)
CO	3.01
NO _x	2.93
PM _{2.5} /PM ₁₀ /PM	0.13
SO ₂	0.01
VOCs	20.93
Total HAPs	-3.04

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 176.8 TPY of VOCs. Due to this facility’s potential to emit over 100 tons per year of criteria pollutant, 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:	45CSR6	Open burning prohibited.
	45CSR13	Permits for construction/modification

45CSR16	Standards of performance pursuant to 40 C.F.R. Part 60
45CSR30	Operating permit requirement.
40 C.F.R. 60 Subpart KKK	NSPS for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants
40 C.F.R. 60 Subpart OOOO	NSPS for Crude Oil and Natural Gas Production, Transmission, and Distribution

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>)
R13-2826K	7/26/2017	

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 with this modification:

- The Old Process Flare (FL-01) was removed from the emission units table since it has been removed from the facility.
- The control device for Startup/Shutdown/Maintenance from units CE-01 through CE-05 and compressors CM-01 through CM-07 (SSM) was changed from FL-01 to FL-02.
- Footnote 3 was revised to address FL-02 instead of FL-01.
- Increased the design capacity of the new process flare FL-02 from 59.21 MMscf/yr to 90.00 MMscf/yr in the emission units table.
- The Hydrocarbon Condensate Tank (T-02) was removed from the emission units table. This tank now stores wastewater as required in condition 8.1.5 of the renewal permit.
- A new emission unit (FUG) was added to the emission units table for Process Piping Fugitives.
- Section 6.0 of this permit was removed. This section addressed FL-01, which has been removed.
- Condition 7.1.1 was revised to reflect new language in condition 8.1.1. of R13-2826K, which addresses FL-02. The revised condition requires a minimum 98.0% destruction and removal efficiency (DRE) of VOCs and organic HAPS from natural gas and NGL released during routine operation as well as upset conditions. The maximum aggregate amount of waste gases sent to the Process Flare from these sources is limited to 90.0 MMscf/yr based on a rolling 12 month total; the previous permitting action limited flare gas consumption to 59.21 MMscf/yr.
- The emission limits for FL-02 in condition 7.1.2 were revised. Additionally, streamlining language stating, "Compliance with this PM₁₀ ensures compliance with the 521 lb/hr limit pursuant to 45CSR§6-

- 4.1. and permit R13-2826, section 8.1.8” was removed. Condition 8.1.2 of R13-2826K was revised and no longer contains particulate emission limits.
- Condition 7.1.3 was revised to include the model, maximum waste-gas capacity, and MDHI for FL-02.
 - Condition 7.1.9 was added to this permit. This condition includes the requirements from condition 8.1.8 of R13-2826K (45CSR§6-4.1. particulate matter limits). This addition was due to the removal of streamlining language from condition 7.1.2.
 - Condition 7.2.2, which requires monitoring of flare throughput, was revised to reflect current language in R13-2826K.
 - The yearly maximum annual volume of liquids throughput to the Produced Water Loading (TLO) was increased from 25,185,000 gal/yr to 25,200,000 gal/yr.
 - Condition 8.1.4 was removed. This condition required T-01 to be shut down and removed by October 3, 2015. This date has passed.
 - Condition 8.1.5 was removed. This condition required T-02 to be changed to wastewater service by October 3, 2015. This date has passed.

Non-Applicability Determinations

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

- a. **45CSR14 – Permits for Construction and Major Modification of Major Stationary Sources for the Prevention of Significant Deterioration of Air Quality.** The Fort Beeler facility permitted under R13-2826K, and incorporated into the initial Title V permit, is not subject to Prevention of Significant Deterioration (PSD) requirements as determined in the Engineering Evaluation for permit R13-2826K. Specifically, no potential to emit for a pollutant exceeds its significance threshold.
- b. **45CSR19 – Permits for Construction and Major Modification of Major Stationary Sources which Cause or Contribute to Nonattainment Areas.** On September 30, 2013, EPA approved a redesignation request and State Implementation Plan (SIP) revision submitted by the State of West Virginia. The West Virginia Department of Environmental Protection (WVDEP) requested that the West Virginia portion of the Wheeling, WV–OH fine particulate matter (PM_{2.5}) nonattainment area (“Wheeling Area” or “Area”) be redesignated as attainment for the 1997 annual PM_{2.5} national ambient air quality standard (NAAQS). The Fort Beeler facility is in Marshall County, which is located in this metropolitan statistical area and is an attainment county for all pollutants. Therefore, the Fort Beeler Facility is not subject to 45CSR19.
- c. **45CSR27 – Control of TAP Emissions.** This rule applies to chemical processing units (45CSR§27-3.1.). The definition of “Chemical Processing Unit” excludes 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 (45CSR§27-2.4.). First, the initial Title V application (Supplement 02 - Regulatory Discussion) states that the product produced by the equipment does not contain more than 5% benzene by weight. Second, the Supplement 05 – Gas Analysis in the application gives the benzene weight percentages at various areas and processes at the facility. The representative inlet gas sample gives a benzene concentration of 0.0029 weight percent, with the permittee’s estimated worst-case at 0.1326 weight percent. Of all the data provided in this supplement, only the waste gas composition to the new process flare is higher, and it is a worst-case of 0.9051 weight percent of benzene. Based upon the provided information, none of the weight percentages are greater than 5%. Therefore, none of the equipment contacts materials containing more than 5% benzene by weight. For these reasons, 45CSR27 is not applicable to the Fort Beeler Processing Plant.

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
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Charleston, WV 25304
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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.