West Virginia Department of Environmental Protection Division of Air Quality





# 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 March 15, 2021.

## Permit Number: **R30-05100127-2021** Application Received: **February 14, 2022** Plant Identification Number: **03-54-051-00127** 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: *MM02* Revised: *July 19, 2022* 

Physical Location: UTM Coordinates: Directions:	Cameron, Marshall County, West Virginia 535.00 km Easting • 4,414.33 km Northing • Zone 17 From Main Street in Cameron: Head north on US-250/Waynesburg Pike for approximately 3.7 miles; Turn left to continue on US- 250/Waynesburg Pike for approximately 2.5 miles; Turn left onto a gravel access road for approximately 0.2 miles; 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 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 contractor/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.

## **Emissions Summary**

This modification results in the following emission changes:

No change in PTE associated with the replacement of Caterpillar G3612LE compressor engine (CE-03).

<b>Change in Facility-Wide PTE</b> (in tons/year) <sup>1</sup>				
Pollutant	R13-2826O	R13-2826P	Change	
Carbon Monoxide (CO)	89.15	89.15	0.00	
Nitrogen Oxides (NO <sub>x</sub> )	94.18	94.18	0.00	
Particulate Matter (PM <sub>10</sub> )	7.09	7.09	0.00	
Sulfur Dioxide (SO <sub>2</sub> )	0.46	0.46	0.00	
Volatile Organic Compounds (VOCs)	157.68	157.68	0.00	
Total HAPs	19.75	19.75	0.00	

<sup>1</sup> PTE data was taken from the R13-2826P Engineering Evaluation/Fact Sheet.

## **Title V Program Applicability Basis**

With the proposed changes associated with this modification, this facility maintains the potential-to-emit 157.68 tons/year of Volatile Organic Compounds (VOCs). Due to this facility's potential to emit over 100 tons per year of a 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:	45CSR13	New Source Review – Modification.	
	45CSR16	Standards of Performance for New	
		Stationary Sources.	
	45CSR30	Operating permit requirement.	
	45CSR34	Emission Standards for Hazardous Air	
		Pollutants.	
	40 C.F.R. Part 60, Subpart JJJJ	Standards of Performance for Stationary	
		Spark Ignition Internal Combustion Engines.	
	40 C.F.R. Part 63, Subpart ZZZZ	National Emissions Standards for Hazardous	
		Air Pollutants for Stationary Reciprocating	
		Internal Combustion Engines.	

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

The active permits/consent orders affected by this modification are as follows:

Permit or	Date of	Permit Determinations or Amendments That
Consent Order Number	Issuance	Affect the Permit ( <i>if any</i> )
R13-2826P	April 05, 2022	

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**

This minor modification incorporates the revisions made with the Modification Permit R13-2826P to replace the existing Caterpillar G3612LE compressor engine (CE-03) with an identical unit. The modification will not cause any changes in potential-to-emit (PTE). CE-03 is a spark ignition (SI) reciprocating internal combustion engine (RICE) located at an area source and, according to the Engineering Evaluation/Fact Sheet for R13-2826P, is not certified by the manufacturer. As such, the recently installed CE-03 is subject to 40 C.F.R. Part 63, Subpart ZZZZ as a "new" stationary RICE via 40 C.F.R. §63.6590(a)(2)(iii) since its manufacture date (2022) is after the applicability date (June 12, 2006). According to 40 C.F.R. §§63.6590(c) and (c)(1), a new RICE at an area source meets the requirements of Subpart ZZZZ by complying with 40 C.F.R. Part 60, Subpart JJJJ. For this reason, some changes have been made to permit conditions related to the applicability of certain Subpart ZZZZ requirements to CE-03 and some new requirements from both R13-2826P and Subpart JJJJ have been incorporated into the permit. Changes to R30-05100127-2021 (MM01) are as follows:

- 1) Section 1.1. Emission Units Table
  - i. The installation year of emission unit CE-03 was updated to 2022.
- 2) Section 1.2. Active R13, R14, and R19 Permits
  - i. R13-2826P was issued on April 05, 2022. This permit was applied for and issued for the reasons described above. Changes in this permit's requirements have been included in Section 4 of this Title V permit modification.
- 3) Section 4.1. Limitations and Standards (Engines and Compressors)
  - i. As stated above, CE-03 is considered a "new" rather than "existing" stationary RICE by 40 C.F.R. Part 63, Subpart ZZZZ due to the manufacture date of CE-03 being after the applicability date. For this reason, CE-03 was removed from the requirements 4.1.13. through 4.1.17. and 4.1.21. since these Subpart ZZZZ requirements are no longer applicable to CE-03.
  - ii. CE-03 is a natural gas fired engine and is therefore subject to 40 C.F.R. §60.4243(e). This requirement is already included in the permit as Condition 4.1.20. Thus, CE-03 was added to the citation for this condition to show that it must comply with this requirement.
  - iii. Sections 4.1.25 through 4.1.27 were added to the permit to account for 40 C.F.R. Part 60 Subpart JJJJ being applicable to CE-03.
    - a. 4.1.25. was included from requirement 5.1.20. of R13-2826P. CE-03 is a SI ICE with an operating engine power of 3,550 HP and, therefore, must meet the requirements of Table 1 of Subpart JJJJ via 40 C.F.R. §60.4233(e). The table was

added to show the emission standards that CE-03 must meet as a non-emergency SI that is fueled by natural gas and that has an operating engine power greater than 500 HP.

- b. 4.1.26. was included from requirement 5.1.21 of R13-2826P and 40 C.F.R. §60.4234 which is applicable to all stationary SI ICE.
- c. 4.1.27. was included from requirement 5.1.22. of R13-2826P and 40 C.F.R. §60.4243(b)(2)(ii). Requirement 4.1.27. sets how compliance must be demonstrated for non-certified, stationary SI internal combustion engines that have a maximum engine power greater than 500 HP.
- 4) Section 4.2 Monitoring Requirements
  - i. CE-03 was removed from the requirements 4.2.2. and 4.2.3. as these 40 C.F.R. Part 63 Subpart ZZZZ requirements are no longer applicable to CE-03 for the reasons stated previously.
- 5) Section 4.3 Testing Requirements
  - i. 4.3.1. was updated to include CE-03 to the testing requirements from 40 C.F.R. §60.4244(a) through (g), which are outlined in this section. These testing requirements must be followed for the emission unit based on 40 C.F.R. §§60.4243(b)(2) and (b)(2)(ii) which applies to stationary SI ICEs that are subject to emission standards specified in Condition 4.1.25. of this permit, are non-certified, and have an operating engine power greater than 500 HP.
- 6) Section 4.4 Recordkeeping Requirements
  - i. CE-03 was removed from the Conditions 4.4.3. through 4.4.5. and 4.4.9. as these Subpart ZZZZ requirements are no longer applicable to CE-03 for the reasons described previously.
  - ii. All SI ICE must meet the reporting and recordkeeping requirements established in 40 CFR §60.4245(a). As such, Condition 4.4.6. was updated to show that CE-03 must meet the requirements in paragraphs (a)(1), (a)(2), and (a)(4) of this section, while GE-01 must meet all the requirements of paragraphs (a)(1) through (a)(4). 40 CFR §60.4245(a)(3) of this requirement is not applicable to CE-03 because the requirement is limited to certified engines.
- 7) Section 4.5 Reporting Requirements
  - i. CE-03 was removed from the citations of Subpart ZZZZ requirements 4.5.1., 4.5.2., and 4.5.6. as these are no longer applicable to CE-03 for the reasons described previously.
  - ii. Section 4.5.5. was updated to include CE-03 since it is subject to performance testing as outlined in Condition 4.3.1. of this permit. Thus 40 C.F.R. §60.4245(d) is applicable.
  - iii. CE-03 is a non-certified, stationary SI ICE with an operating engine power of 3,550 HP, and as such CE-03 must submit initial notification established in 40 C.F.R. §§60.4245 (c)(1) through (c)(5). The requirements for this notification are described in Condition 4.5.8. which has been added to the permit.

## **Non-Applicability Determinations**

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

N/A

## **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:

Sarah Barron West Virginia Department of Environmental Protection Division of Air Quality 601 57<sup>th</sup> Street SE Charleston, WV 25304 304/926-0499 ext. 41915 sarah.k.barron@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.