

Fact Sheet



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

Permit Number: **R30-05100127-2015**
Application Received: **December 18, 2014**
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**

Revised: N/A

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.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]			
Regulated Pollutants	Fort Beeler PTE¹	Groves PTE¹	Total Aggregated Source PTE
Carbon Monoxide (CO)	86.06	0.08	86.14
Nitrogen Oxides (NO _x)	91.15	0.10	91.25
Particulate Matter (PM _{2.5})	6.96	< 0.01	6.96
Particulate Matter (PM ₁₀)	6.96	< 0.01	6.96
Total Particulate Matter (TSP)	6.96	< 0.01	6.96
Sulfur Dioxide (SO ₂)	0.45	< 0.01	0.45
Volatile Organic Compounds (VOC)	138.86	17.01	155.87

PM_{2.5} and PM₁₀ are components of TSP.

Hazardous Air Pollutants	Fort Beeler PTE	Groves PTE	Total Aggregated Source PTE
Benzene	2.77	0.31	3.08
Ethylbenzene	2.68	---	2.68
Formaldehyde (HCHO)	4.54	7.1×10^{-5}	4.54
n-Hexane	3.46	0.30	3.76
Toluene	2.74	1.34	4.08
Xylenes	2.71	4.27	6.98
Other HAP (Acrolein, MeOH, etc.)	3.04	1.8×10^{-6}	3.04
Total HAP	15.63	6.22	21.85

¹ Fort Beeler and Groves potential emissions are from the initial Title V permit application. Specifically, the potential emissions are provided in the application's Supplement 03 Criteria Pollutants – Controlled Emissions Summary.

Title V Program Applicability Basis

The aggregated source has the potential to emit 155.87 tpy of VOC. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Williams Ohio Valley Midstream's Fort Beeler Gas Processing Plant 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 45CSR2A 45CSR6 45CSR10 45CSR11 45CSR13 45CSR16 WV Code § 22-5-4 (a) (14) 45CSR30 45CSR34 40 C.F.R. 60 Subpart Dc 40 C.F.R. 60 Subpart KKK 40 C.F.R. 60 Subpart JJJJ 40 C.F.R. 60 Subpart OOOO 40 C.F.R. Part 61 40 C.F.R. 63 Subpart HH 40 C.F.R. 63 Subpart ZZZZ 40 C.F.R. Part 82, Subpart F	Control of PM from Indirect Heat Exchangers Testing, Monitoring, Recordkeeping and Reporting Requirements under 45CSR2 Open burning prohibited. Control of Air Pollution from Sulfur Oxides Standby plans for emergency episodes. Permits for construction/modification Standards of performance pursuant to 40 C.F.R. Part 60 The Secretary can request any pertinent information such as annual emission inventory reporting. Operating permit requirement. Emission standards for HAPs NSPS for small steam generating units NSPS for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants NSPS for Spark Ignition IC Engines NSPS for Crude Oil and Natural Gas Production, Transmission, and Distribution Asbestos inspection and removal Oil and Natural Gas Production Facilities MACT RICE MACT 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	Permitted Facility	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2826I	May 26, 2015	Fort Beeler Gas Processing Plant	
R13-3212	December 16, 2014	Groves Dehydration Station	

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

1. **45CSR2 – To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers.** This rule establishes emission limitations for smoke and particulate matter which are discharged from fuel burning units. The facility has six (6) process heaters (Em. Unit IDs: H-01 through H-06) that are “Fuel Burning Unit[s]” as defined in 45CSR§2-2.10. In addition, the co-located Groves Dehydration Station has a reboiler (BLR-01) that is a fuel burning unit subject to this rule. All of these sources are in the Type ‘b’ category since they combust natural gas (45CSR§2-2.10.b.).

Standards and Limitations

Opacity. The units are subject to the ten (10) percent opacity standard in 45CSR§2-3.1. and the corresponding Method 9 or COMS compliance demonstration method prescribed in 45CSR§2-3.2. Both of these requirements are included in sections 6.1.13., 6.1.15., and 6.2.1. of R13-2826I and sections 5.1.2. and 5.3.1. of R13-3212 (discussed in their respective section below), which are Title V permit conditions 5.1.13., 5.2.1., 11.1.2., and 11.3.1.

PM Mass Emission Rate. Fuel burning units having a design heat input (DHI) less than 10 MMBtu/hr are exempt from sections 4, 5, 6, 8, and 9 of 45CSR2 (45CSR§2-11.1). Therefore, heaters H-02, H-03, and H-04 are not subject to a PM mass rate limit in 45CSR§2-4. The Groves reboiler is rated at 0.20 MMBtu/hr; therefore, it is also exempt from the aforementioned sections of the rule. However, the remaining units are subject to the particulate matter mass rate emission limit in 45CSR§2-4.1.b. Using the prescribed multiplier (0.09) and the DHI of each source, the 45CSR2 PM mass rate limit for each affected unit is given in the table below:

Em. Unit ID	Em. Pt. ID	Description	DHI (MMBtu/hr)	45CSR2 Limit (lb/hr)	PM PTE (lb/hr)
H-01	9E	TXP1 Hot Oil Heater	10.00	0.90	0.08
H-05	13E	TXP2 Heat Medium Heater	21.22	1.91	0.18
H-06	14E	TXP3 Heat Medium Heater	21.22	1.91	0.18

The 45CSR2 PM limit for H-01 has been written as permit condition 5.1.15. According to the Title V application, the potential PM emissions from H-01 are 0.08 lb/hr, which are substantially less than the allowable emissions computed above. Therefore, the permittee should meet the PM mass rate limit for H-01.

Underlying permit R13-2826I, section 6.1.11., limits PM₁₀ from each heater H-05 and H-06 to 0.18 lb/hr. Therefore, a streamlining note is included in Title V condition 5.1.11. to indicate that compliance with the NSR permit limitation ensures compliance with the 45CSR2 limit.

Monitoring

Since the units H-01, H-05, and H-06 combust only natural gas, they qualify for the exception in 45CSR§2-8.4.b. This provides that qualifying sources are not subject to 45CSR§2-8.1.a. (*i.e.*, periodic testing of both opacity and PM mass rate) and 45CSR§2-8.2. (*i.e.*, monitoring plans and COMS). However, permit R13-2826I, section 6.2.1. (Title V condition 5.2.1.), has prescribed Method 9 monitoring to demonstrate compliance with the opacity limitation at the discretion of the Director.

Testing

While 45CSR§2-8.1.a. is not applicable due to the exception discussed above, 45CSR§§2-8.1.b. and 8.1.c. are applicable to H-01, H-05, and H-06 and are set forth as Title V condition 5.3.1.

Recordkeeping and Reporting

Neither 45CSR§§2-8.3.a. nor 8.3.b. are applicable since both pertain to monitoring plans, which are not applicable. However, 45CSR§2-8.3.c. is applicable to units H-01, H-05, and H-06 and is embodied

- in sections 6.3.1. and 6.3.4. of R13-2826I. Therefore, this section of the rule is cited in Title V conditions 5.4.1. and 5.4.4. In addition, for fuel burning units that combust only pipeline quality natural gas, 45CSR§2A-7.1.a.1. requires recordkeeping of date and time of start-up and shutdown, and the quantity of fuel consumed on a monthly basis. The language “on a monthly basis” is added to the first sentence of conditions 5.4.1. and 5.4.4. Similarly, the statement “The permittee shall maintain records of the date and time of fuel burning unit start-up and shutdown” in both permit conditions.
2. **45CSR4 – To Prevent and Control the Discharge of Air Pollutants into the Open Air which Causes or Contributes to an Objectionable Odor or Odors.** The applicable requirements of this rule are included in the Title V boilerplate as condition 3.1.4.
 3. **45CSR6 – Control of Air Pollution from Combustion of Refuse.** This rule establishes emission standards for particulate matter and requirements for activities involving incineration of refuse which are not subject to, or are exempted from regulation under a federal counterpart for specific combustion sources. This rule also prohibits (with limited exception) open burning. The open burning provisions of 45CSR§6-3 are included in the Title V boilerplate as conditions 3.1.1. and 3.1.2. This rule also applies to the permittee’s Old Process Flare FL-01 (Em. Pt. ID: 17E) and New Process Flare FL-02 (Em. Pt. ID: 18E), which are considered incinerators for this rule and are therefore subject to the emission standards in 45CSR§6-4.1.

Standards and Limitations

The mass rate limitation in 45CSR§6-4.1. is based upon incinerator capacity, which is the manufacturer’s or designer’s guaranteed maximum charging rate or such other rate as determined by the Director (45CSR§§6-2.9 and 4.1.). Hence, these values have been used to compute the 45CSR6 PM limit for each of the flares in the table below.

Flare FL-01

According to the discussion of this rule in the Engineering Evaluation for R13-2826H, the maximum flare capacity is 5,245 lb/hr (or 2.62 tons/hr). Therefore, using the factor 5.43 for units less than 15,000 lb/hr capacity, the PM limit from 45CSR§6-4.1. is:

$$\begin{aligned} \text{Emissions (lb/hr)} &= F \times \text{Incinerator Capacity (tons/hr)} \\ \text{Emissions (lb/hr)} &= (5.43) \times (2.62 \text{ tons/hr}) \\ \text{Emissions (lb/hr)} &= 14.2 \text{ lb/hr} \end{aligned}$$

The same evaluation states that worst-case PM rate from the flare is 1.79 lb/hr (also the PTE in application Attachment E), which is 12.6% of the above calculated limit. The NSR permit R13-2826H limited PM₁₀ to 1.79 lb/hr and 0.02 tpy in its section 7.1.2. Therefore, a streamlining note has been included in Title V condition 6.1.2.

Flare FL-02

According to the discussion of this rule in the Engineering Evaluation for R13-2826H, the maximum flare capacity from the manufacturer is 383,000 lb/hr (or 191.5 tons/hr). Therefore, using the factor 2.72 for units greater than 15,000 lb/hr capacity, the PM limit from 45CSR§6-4.1. is:

$$\begin{aligned} \text{Emissions (lb/hr)} &= F \times \text{Incinerator Capacity (tons/hr)} \\ \text{Emissions (lb/hr)} &= (2.72) \times (191.5 \text{ tons/hr}) \\ \text{Emissions (lb/hr)} &= 521 \text{ lb/hr} \end{aligned}$$

The same evaluation states that worst-case PM rate from the flare is 4.04 lb/hr (also the PTE in application Attachment E), which is less than 1% of the above calculated limit. The NSR permit R13-2826H limited PM₁₀ to 4.04 lb/hr and 0.28 tpy in its section 8.1.2. Therefore, a streamlining note has been included in Title V condition 7.1.2.

Even though the source is in Marshall County, the operating restrictions in 45CSR§6-4.2. are not applicable to the flare as provided in the last statement of that subsection.

Monitoring, Testing, and Operations Requirements

The visible PM requirements of 45CSR§§6-4.3., 4.4., and 4.5. are applicable. However, permit R13-2826I, sections 7.1.3.b. and 8.1.3.b. prescribe no visible emissions except for certain 5-minute periods for flares FL-01 and FL-02, respectively. Since the NSR permit requirement is more stringent than the applicable 45CSR6 visible emission standards, a streamlining note has been added after conditions 6.1.3.b., 7.1.3.b., 7.1.5., and 7.1.6. Also, the 45CSR6 subsections have been included in the citations of authority for conditions 6.1.3. and 7.1.3.

The operations and maintenance requirement to prevent objectionable odors in 45CSR§6-4.6. is applicable. For flare FL-01 it is written as condition 6.1.5. The requirement is already included in section 8.1.7. of R13-2826I; therefore, this rule requirement is cited with Title V condition 7.1.7.

The testing requirements in 45CSR§§6-7.1. and 7.2. are applicable; therefore, they are included as Title V conditions 6.3.3. and 7.3.3. for flares FL-01 and FL-02, respectively.

4. **45CSR10 – To Prevent and Control Air Pollution from the Emission of Sulfur Oxides.** The purpose of this rule is to prevent and control air pollution from the emission of sulfur oxides. The facility has six (6) process heaters (H-01 through H-06) that are “Fuel Burning Unit[s]” as defined in 45CSR§10-2.8. In addition, the co-located Groves Dehydration Station has a reboiler (BLR-01) that is a fuel burning unit subject to this rule. These sources are in the Type ‘b’ category since they combust natural gas (45CSR§10-2.8.b.). Since the facility is located in Marshall County, the facility is designated as being in Priority Classification I according to Table 45-10A at the end of 45CSR10.

Heaters H-02, H-03, H-04, and BLR-01 are all less than 10 MMBtu/hr design heat input. In accordance with the exemption in 45CSR§10-10.1., these units are exempt from the emission limitations in sections 3, and 6 through 8 of 45CSR10.

Standards and Limitations

The Engineering Evaluation for R13-2826H states that 45CSR§10-3.2.c. is the applicable requirement to determine the SO₂ mass rate limit for the affected sources. However, this is incorrect since the facility is in the Priority I Region. Therefore, the applicable requirement is in 45CSR§10-3.1.e. Using the prescribed multiplier (3.1) and the total design heat inputs from each source, the SO₂ mass rate limit is:

Total Allowable Emission Rate for H-01, H-05, and H-06 = ...

$$\dots (3.1) \times (10.00 \text{ MMBTU/hr} + 21.22 \text{ MMBtu/hr} + 21.22 \text{ MMBtu/hr}) = 162.6 \text{ lb/hr}$$

According to the Title V application, the aggregate potential SO₂ emissions from 9E, 13E, and 14E are 0.038 lb/hr. The potential emissions are substantially less than the allowable emissions computed above; therefore, the permittee should meet the SO₂ mass rate limits for these units. The NSR permit R13-2826I did not set an SO₂ limit based upon potentials, nor did it include the 45CSR10 limit computed in its engineering evaluation. Since a Title V permit must include all applicable requirements, permit condition 5.1.16. has been written to include the SO₂ mass rate limit computed above.

None of the heaters’ operation results in the separation of the air pollutant (i.e., SO₂) from the process materials or in the conversion of the process materials into air pollutants. Therefore, the heaters are not considered a “source operation” as defined in 45CSR§10-2.19. Consequently, the in-stack SO₂ concentration limitation in 45CSR§10-4.1. does not apply.

None of the heaters combust a refinery process gas stream or any other process gas stream; therefore, the hydrogen sulfide concentration limit in 45CSR§10-5.1. does not apply.

Monitoring and Recordkeeping

45CSR§10-10.3. provides an exemption from section 8 requirements for natural gas-burning units. Therefore, none of the testing, monitoring, recordkeeping, and reporting in 45CSR§10-8 is included in the Title V permit. Considering the anticipated high margin of compliance, the recordkeeping already required by R13-2826I, sections 6.3.1. and 6.3.4. (Title V conditions 5.4.1. and 5.4.4.) for other pollutants would be adequate to demonstrate compliance with the SO₂ limit in condition 5.1.16. should such demonstration ever be deemed necessary by the Director.

5. **45CSR13, Permit No. R13-2826H.** The initial Title V permit application was submitted based upon the requirements of this NSR permit being the current permit. Hence, the requirements of this underlying permit are incorporated into the Title V permit as described in the following table. However, later during technical review the permittee submitted an application to revise this NSR permit in order to make three corrections to the emission units table. Those changes do not, however, affect the details given in the table below. The revisions are described in the next section of this Fact Sheet. For incorporation into the Title V permit, language in underlying permit requirements that are NSPS or MACT requirements and mention “this subpart” have been revised to specify the specific subpart so that reliance on the citation of authority is not required to readily interpret the requirement.

R13-2826H	Title V	Discussion
Facility-wide		
4.1.1.	3.4.1.	The requirement is the same as the Title V permit boilerplate condition; therefore, the NSR permit condition is included in the citation of authority.
4.1.2.	3.1.9.	The requirement is written in the Title V permit.
4.1.3.	3.1.10.	The requirement is written in the Title V permit.
4.1.4.	3.4.4.	The requirement is written in the Title V permit.
Engines CE-01, CE-02, CE-03, CE-04, CE-05, GE-01		
5.1.1.	4.1.1.	The requirement is written in the Title V permit.
5.1.2.	4.1.2.	The requirement is written in the Title V permit.
5.1.3.	4.1.3.	The requirement is written in the Title V permit.
5.1.4.	4.1.4.	The requirement is written in the Title V permit.
5.1.5.	4.1.5.	The requirement is written in the Title V permit.
5.1.6.	4.1.6.	The requirement is written in the Title V permit.
5.1.7.	4.1.7.	The requirement is written in the Title V permit. The word “engine” is added after “emergency generator” per the applicant’s request in 6/18/2015 technical correspondence. This addition agrees with the nomenclature used in the next underlying requirement 5.1.8.
5.1.8.	4.1.8.	The requirement is written in the Title V permit.
5.1.9.	4.1.9.	The requirement is written in the Title V permit.
5.1.10.	4.1.10.	The requirement is written in the Title V permit. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart JJJJ.

R13-2826H	Title V	Discussion
5.1.11.	4.1.11.	The requirement is written in the Title V permit. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart JJJJ.
5.1.12.	4.1.12.	The requirement is written in the Title V permit; however, the underlying NSPS regulation language has been revised since it was included in this NSR permit. The operating permit will include the current NSPS language. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart JJJJ.
5.1.13.	4.1.13.	The requirement is written in the Title V permit. 45CSR34 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 63 Subpart ZZZZ.
5.1.14.	4.1.14.	The requirement is written in the Title V permit. 45CSR34 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 63 Subpart ZZZZ. Engine CE-01 is excluded from the applicability of this requirement since it is less than 500-hp. The NSR permit citation is corrected to be §63.6603(f).
5.1.15.	4.1.15.	The requirement is written in the Title V permit. 45CSR34 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 63 Subpart ZZZZ.
5.1.16.	4.1.16.	The requirement is written in the Title V permit. 45CSR34 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 63 Subpart ZZZZ.
5.1.17.	4.1.17.	The requirement is written in the Title V permit. 45CSR34 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 63 Subpart ZZZZ.
5.1.18.	4.5.1.	The requirement is written in the reporting subsection of the Title V permit. 45CSR34 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 63 Subpart ZZZZ.
5.1.19.	4.5.2.	The requirement is written in the reporting subsection of the Title V permit. 45CSR34 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 63 Subpart ZZZZ.
5.2.1.	4.2.1.	The requirement is written in the Title V permit.
5.2.2.	4.2.2.	The requirement is written in the Title V permit. 45CSR34 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 63 Subpart ZZZZ.
5.2.3.	4.2.3.	The requirement is written in the Title V permit. 45CSR34 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 63 Subpart ZZZZ.
5.2.4.	4.2.4.	The requirement is written in the Title V permit. 45CSR34 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 63 Subpart ZZZZ.
5.3.1.	4.3.1.	The requirement is written in the Title V permit. 45CSR16 is added to the citations of authority since the condition requires compliance with 40 C.F.R. 60 Subpart JJJJ. 40 C.F.R. §§63.6590(c) and (c)(1) with 45CSR34 are added to the final citation of authority since compliance with NSPS Subpart JJJJ is the means of complying with MACT Subpart ZZZZ for GE-01 for the reasons discussed in the Subpart ZZZZ section of this Fact Sheet.
5.4.1.	4.4.1.	The requirement is written in the Title V permit.
5.4.2.	4.4.2.	The requirement is written in the Title V permit.

R13-2826H	Title V	Discussion
5.4.3.	4.4.3.	The requirement is written in the Title V permit. 45CSR34 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 63 Subpart ZZZZ.
5.4.4.	4.4.4.	The requirement is written in the Title V permit. 45CSR34 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 63 Subpart ZZZZ.
5.4.5.	4.4.5.	The requirement is written in the Title V permit. 45CSR34 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 63 Subpart ZZZZ.
5.4.6.	4.4.6.	The requirement is written in the Title V permit. 45CSR16 is added to the citations of authority since the condition requires compliance with 40 C.F.R. 60 Subpart JJJJ. 40 C.F.R. §§63.6590(c) and (c)(1) with 45CSR34 are added to the citation of authority since compliance with NSPS Subpart JJJJ is the means of complying with MACT Subpart ZZZZ for GE-01 for the reasons discussed in the Subpart ZZZZ section of this Fact Sheet.
Heaters (H-01, H-02, H-03, H-04, H-05, H-06)		
6.1.1.	5.1.1.	The requirement is written in the Title V permit.
6.1.2.	5.1.2.	The requirement is written in the Title V permit.
6.1.3.	5.1.3.	The requirement is written in the Title V permit.
6.1.4.	5.1.4.	The requirement is written in the Title V permit.
6.1.5.	5.1.5.	The requirement is written in the Title V permit.
6.1.6.	5.1.6.	The requirement is written in the Title V permit.
6.1.7.	5.1.7.	The requirement is written in the Title V permit.
6.1.8.	5.1.8.	The requirement is written in the Title V permit.
6.1.9.	5.1.9.	The requirement is written in the Title V permit.
6.1.10.	5.1.10.	The requirement is written in the Title V permit.
6.1.11.	5.1.11.	The requirement is written in the Title V permit.
6.1.12.	5.1.12.	The requirement is written in the Title V permit.
6.1.13.	5.1.13.	The requirement is written in the Title V permit.
6.1.14.	5.1.14.	The requirement is written in the Title V permit. 45CSR16 is added to the citations of authority since the condition requires compliance with 40 C.F.R. 60 Subpart Dc.
6.1.15.	5.1.13.	This requirement is identical in its authority and applicability with underlying condition 6.1.13.; therefore, this underlying requirement is cited with Title V condition 5.1.13.
6.2.1.	5.2.1.	The requirement is written in the Title V permit.
6.3.1.	5.4.1.	The requirement is written in the Title V permit.
6.3.2.	5.4.2.	The requirement is written in the Title V permit.
6.3.3.	5.4.3.	The requirement is written in the Title V permit.
6.3.4.	5.4.4.	The requirement is written in the Title V permit.
6.3.5.	5.4.5.	The requirement is written in the Title V permit. 45CSR16 is added to the citations of authority since the condition requires compliance with 40 C.F.R. 60 Subpart Dc.
6.3.6.	5.4.6.	The requirement is written in the Title V permit. 45CSR16 is added to the citations of authority since the condition requires compliance with 40 C.F.R. 60 Subpart Dc.
6.3.7.	5.4.7.	The requirement is written in the Title V permit. 45CSR16 is added to the citations of authority since the condition requires compliance with 40 C.F.R. 60 Subpart Dc.

R13-2826H	Title V	Discussion
6.4.1.	5.5.1.	The requirement is written in the reporting subsection of the Title V permit.
Flare Control Device FL-01		
7.1.1.	6.1.1.	The requirement is written in the Title V permit.
7.1.2.	6.1.2.	The requirement is written in the Title V permit.
7.1.3.	6.1.3.	The requirement is written in the Title V permit.
7.1.4.	6.1.4.	The requirement is written in the Title V permit.
7.2.1.	6.2.1.	The requirement is written in the Title V permit.
7.2.2.	6.2.2.	The requirement is written in the Title V permit.
7.3.1.	6.3.1.	The requirement is written in the Title V permit.
7.3.2.	6.3.2.	The requirement is written in the Title V permit.
7.4.1.	6.4.1.	The requirement is written in the Title V permit.
7.4.2.	6.4.2.	The requirement is written in the Title V permit.
7.4.3.	6.4.3.	The requirement is written in the Title V permit.
7.4.4.	6.4.4.	The requirement is written in the Title V permit.
7.4.5.	6.4.5.	The requirement is written in the Title V permit.
7.5.1.	6.5.1.	The requirement is written in the Title V permit.
7.5.2.	6.5.2.	The requirement is written in the Title V permit.
7.5.3.	6.5.3.	The requirement is written in the Title V permit.
Flare Control Device FL-02		
8.1.1.	7.1.1.	The requirement is written in the Title V permit.
8.1.2.	7.1.2.	The requirement is written in the Title V permit.
8.1.3.	7.1.3.	The requirement is written in the Title V permit.
8.1.4.	7.1.4.	The requirement is written in the Title V permit.
8.1.5.	7.1.5.	The requirement is written in the Title V permit.
8.1.6.	7.1.6.	The requirement is written in the Title V permit.
8.1.7.	7.1.7.	The requirement is written in the Title V permit.
8.1.8.	7.1.2.	This underlying permit requirement restates the language in 45CSR§6-4.1. without specifying the PM limit for the New Process Flare FL-02. The limit has been computed in the 45CSR6 section of this Fact Sheet, and is greater than the PM limit in the underlying requirement 8.1.2. Therefore, a streamlining note has been added to Title V condition 7.1.2. and no separate Title V condition is written for underlying requirement 8.1.8.
8.1.9.	7.1.8.	The requirement is written in the Title V permit.
8.2.1.	7.2.1.	The requirement is written in the Title V permit.
8.2.2.	7.2.2.	The requirement is written in the Title V permit.
8.3.1.	7.3.1.	The requirement is written in the Title V permit.
8.3.2.	7.3.2.	The requirement is written in the Title V permit.
8.4.1.	7.4.1.	The requirement is written in the Title V permit.
8.4.2.	7.4.2.	The requirement is written in the Title V permit.
8.4.3.	7.4.3.	The requirement is written in the Title V permit.
8.4.4.	7.4.4.	The requirement is written in the Title V permit.
8.4.5.	7.4.5.	The requirement is written in the Title V permit.
8.5.1.	7.5.1.	The requirement is written in the Title V permit.
8.5.2.	7.5.2.	The requirement is written in the Title V permit.
8.5.3.	7.5.3.	The requirement is written in the Title V permit.
8.5.4.	7.5.4.	The requirement is written in the Title V permit.

R13-2826H	Title V	Discussion
Storage Tanks (T01, T02, T03, T04), Produced Water Loading (TLO)		
9.1.1.	8.1.1.	The requirement is written in the Title V permit.
9.1.2.	8.1.2.	The requirement is written in the Title V permit.
9.1.3.	8.1.3.	The requirement is written in the Title V permit.
9.1.4.	8.1.4.	The requirement is written in the Title V permit. The requirement sets a 10-month deadline after the issuance of R13-2826H. Ten months after the issuance of R13-2826H is October 3, 2015, which has been specified in the Title V permit condition.
9.1.5.	8.1.5.	The requirement is written in the Title V permit. The requirement sets a 10-month deadline after the issuance of R13-2826H. Ten months after the issuance of R13-2826H is October 3, 2015, which has been specified in parenthesis in the Title V permit condition.
9.2.1.	8.4.1.	The requirement is written in the Title V permit.
9.2.2.	8.4.2.	The requirement is written in the Title V permit.
40 C.F.R. 60 Subpart KKK Requirements (TXP1, TXP2 Process Units)		
10.1.1.	9.1.1.	The requirement is written in the Title V permit. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart KKK.
10.1.2.	9.1.2.	The requirement is written in the Title V permit. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart KKK.
10.1.3.	9.1.3.	The requirement is written in the Title V permit. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart KKK.
10.1.4.	9.1.4.	The requirement is written in the Title V permit. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart KKK.
10.2.1.	9.4.1.	The requirement is written in the Title V permit. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart KKK.
10.2.2.	9.5.1.	The requirement is written in the Title V permit. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart KKK.
40 C.F.R. 60 Subpart OOOO Requirements (Inlet, TXP3 Process Units)		
11.1.1.	10.1.1.	The requirement is written in the Title V permit. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart OOOO.
11.1.2.	10.1.2.	The requirement is written in the Title V permit. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart OOOO.
11.1.3.	10.1.3.	The requirement is written in the Title V permit. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart OOOO.
11.1.4.	10.1.4.	The requirement is written in the Title V permit. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart OOOO.
11.1.5.	10.1.5.	The requirement is written in the Title V permit. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart OOOO.

R13-2826H	Title V	Discussion
11.2.1.	10.1.6.	The requirement is written in the Title V permit. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart OOOO.
11.3.1.	10.1.7.	The requirement is written in the Title V permit. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart OOOO.
11.3.2.	None	The entire underlying condition sets forth affirmative defense language that, at the time of writing this Title V permit during the first quarter of 2015, is no longer in Subpart OOOO. The underlying permit cites 40 C.F.R. §60.5415; however, that section currently contains no such language. For these reasons the underlying permit requirement will not be included in the Title V permit.
11.4.2.	10.4.1.	The requirement is written in the Title V permit. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart OOOO.
11.4.3.	10.5.1.	The requirement is written in the Title V permit. 45CSR16 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 60 Subpart OOOO.

6. **45CSR13, Permit No. R13-2826I.** During the technical review period for this initial Title V permit an application for a Class I Administrative Update of the underlying permit R13-2826H was submitted. The purpose of the update was to correct the design capacity of storage tank T-02 and to correct the installation date for both storage tanks T-03 and T-04. The capacity of T-02 was changed from 8,400 gallons to 8,820 gallons. The installation dates for T-03 and T-04 were changed from 2010 to 2011. These changes are incorporated into the Title V permit subsection 1.1. All other applicable requirements in R13-2826I have been incorporated into the operating permit as discussed above under permit R13-2826H.

7. **45CSR13, Permit No. R13-3212.** This is a permit for an “after the fact” construction and operation of a natural gas dehydration unit named “Groves Dehydration Station” that is co-located at the Fort Beeler Gas Processing Plant. The permit establishes requirements for one (1) TEG Dehydration Unit Flash Tank/Still Vent (Em. Unit ID: DH-01) and one (1) TEG Dehydrator Reboiler (Em. Unit ID: BLR-01). Emissions from the Groves Dehydration Station have been aggregated with Fort Beeler Gas Processing Plant for major source and PSD status for the reasons discussed in Section 16 of this Fact Sheet.

Dehydrator (DH-01)

One (1) 5.0 million standard cubic feet per day (mmscfd) triethylene glycol (TEG) dehydrator will be utilized at the facility. The dehydrator is comprised of a contactor/absorber tower (no vented emissions), a flash tank, and a regenerator/still vent.

Reboiler (BLR-01)

One (1) 0.20 million British Thermal Units per hour (MMBTU/hr) glycol (TEG) reboiler is utilized to supply heat for the TEG regenerator/still vent.

Glycol and Methanol Storage Tanks

There are small tanks with insignificant emissions for glycol and methanol storage.

Fugitive Emissions

During routine operation of the facility there will be occasional leaks from process piping components such as valves, flanges, connectors, etc. Leaks from the process piping components result in VOC and HAP emissions to the atmosphere.

Facility Potential Emissions

Total facility PTE for the Groves Dehydration Station were obtained from the Supplement 03 Criteria Pollutants – Controlled Emissions Summary in the initial Title V permit application. This data is provided in the Emissions Summary at the beginning of this Fact Sheet.

The specific requirements in permit R13-3212 are incorporated into the Title V permit as set forth in the following table:

R13-3212	Title V	Discussion
Facility-wide		
4.1.1.	3.4.1.	The requirement is the same as the Title V permit boilerplate condition; therefore, the NSR permit condition is included in the citation of authority.
4.1.2.	3.1.9.	The requirement is written in the Title V permit.
4.1.3.	3.1.10.	The requirement is written in the Title V permit.
4.1.4.	3.4.4.	The requirement is written in the Title V permit.
4.1.5.	3.1.11.	The requirement is written in the Title V permit.
Reboiler (BLR-01)		
5.1.1.	11.1.1.	The requirement is written in the Title V permit. Since the maximum design heat input of the unit and potential emissions are comparatively small for BLR-01, and considering the fact that it combusts only natural gas, and that opacity requirements are in place for BLR-01, there is no need to provide additional MRR for the 0.20 MMBtu/hr limit in this permit condition.
5.1.2.	11.1.2.	The requirement is written in the Title V permit.
5.2.1.	11.2.1.	The requirement is written in the Title V permit.
5.3.1.	11.3.1.	The requirement is written in the Title V permit.
5.4.1.	11.4.1.	The requirement is written in the Title V permit.
5.5.1.	11.5.1.	The requirement is written in the Title V permit.
Natural Gas Dehydration Unit (DH-01)		
6.1.1.	12.1.1.	The requirement is written in the Title V permit.
6.1.2.	12.1.2.	The requirement is written in the Title V permit.
6.1.3.	12.1.3.	The requirement is written in the Title V permit.
6.1.4.	12.1.4.	The requirement is written in the Title V permit.
6.1.5.	12.1.5.	The requirement is written in the Title V permit. 45CSR34 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 63 Subpart HH.
6.1.6.	12.1.6.	The requirement is written in the Title V permit. 45CSR34 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 63 Subpart HH.
6.2.1.	12.2.1.	The requirement is written in the Title V permit.
6.2.2.	12.2.2.	The requirement is written in the Title V permit. 45CSR34 is added to the citation of authority since the condition is utilized for compliance with 40 C.F.R. 63 Subpart HH.
6.3.1.	12.3.1.	The requirement is written in the Title V permit.

R13-3212	Title V	Discussion
6.3.2.	12.3.2.	The requirement is written in the Title V permit. 45CSR34 is added to the citation of authority since the condition requires compliance with 40 C.F.R. 63 Subpart HH.
6.4.1.	12.4.1.	The requirement is written in the Title V permit.
6.4.2.	12.4.2.	The requirement is written in the Title V permit.

8. **45CSR16 – Standards of Performance for New Stationary Sources.** This rule establishes and adopts standards of performance for new stationary sources promulgated by U.S. EPA pursuant to section 111(b) of the federal Clean Air Act, as amended. This rule codifies general procedures and criteria to implement the standards of performance for new stationary sources set forth in 40 C.F.R. Part 60. This rule adopts these federal standards, except as specified in 45CSR§16-4.1. Therefore, this rule is cited with each NSPS requirement (*i.e.*, Subparts Dc, JJJJ, KKK, and OOOO) in the operating permit.

9. **45CSR34 – Emission Standards for Hazardous Air Pollutants.** This rule establishes and adopts a program of national emission standards for hazardous air pollutants and other regulatory requirements promulgated by the United States Environmental Protection Agency pursuant to 40 CFR Parts 61, 63 and section 112 of the federal Clean Air Act, as amended. This rule codifies general procedures and criteria to implement emission standards for stationary sources that emit (or have the potential to emit) one or more of the eight substances listed as hazardous air pollutants in 40 CFR §61.01(a), or one or more of the substances listed as hazardous air pollutants in section 112(b) of the CAA. This rule adopts these federal standards, except as specified in 45CSR§34-4.1. Therefore, this rule is cited with each NESHAP and NESHAP-MACT requirement (*i.e.*, boilerplate condition 3.1.3. and Subparts HH and ZZZZ) in the operating permit.

10. **40 C.F.R. 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.** The affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr). The heaters H-01, H-05, and H-06 are steam generating units as defined in §60.41c, and as such, are subject to this regulation. All three units combust only natural gas.

The permittee is subject to all applicable notifications, recordkeeping, and reporting requirements present in 40 C.F.R. 60 Subpart Dc. In accordance with 40 C.F.R. 60 Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, the permittee shall conduct any applicable compliance testing of the affected heaters within 180 days after initial startup.

The table below sets out the various sections of the regulation and details why requirements either are, or are not, applicable to heaters H-01, H-05, and H-06, and describes how the applicable requirements are incorporated into the Title V permit. The sections that are applicable are emphasized with bold font.

Subpart Dc	Title V	Discussion
§§60.42c(a), (b), (c), (d), (e)	None	These sections regarding SO ₂ standards are not applicable since they pertain to combustion of coal and oil.
§60.42c(f)	None	This section is not applicable since it pertains to percent reduction requirements in §60.42c(b) which are non-applicable.
§60.42c(g)	None	This section is not applicable since it pertains to percent reduction requirements, fuel oil sulfur limits, and emission limits in §60.42c, none of which are applicable.

Subpart Dc	Title V	Discussion
§60.42c(h)	None	This section is not applicable since it pertains to emission limits and fuel oil sulfur limits in §60.42c, none of which are applicable.
§60.42c(i)	None	This section is not applicable since it pertains to SO ₂ emission limits, fuel oil sulfur limits, and percent reduction requirements in §60.42c, none of which are applicable.
§60.42c(j)	None	This section is not applicable since the source is not located in a noncontinental area and is not subject to a percent reduction standard in this regulation.
§60.43c(a)	None	This section regarding PM standards is not applicable since it pertains to combustion of coal.
§60.43c(b)	None	This section regarding PM standards is not applicable since it pertains to combustion of wood.
§60.43c(c)	None	This section regarding PM standards is not applicable since it pertains to combustion of coal, wood, or oil.
§60.43c(d)	None	This section regarding PM standards is not applicable since it pertains to PM and opacity standards in §60.43c, none of which are applicable.
§60.43c(e)	None	This section regarding PM standards is not applicable since it pertains to combustion of coal, wood, oil, or combinations of these fuels.
§§60.44c and 60.46c	None	These sections are not applicable since the units are not subject to Subpart Dc SO ₂ emission limits or standards.
§§60.45c and 60.47c	None	These sections are not applicable since the units are not subject to Subpart Dc PM emission limits or standards.
§60.48c(a)	5.5.2.	This section is applicable, and requires the permittee to submit a notification of the date of construction and actual start-up, as provided by 40 C.F.R. §60.7.
§§60.48c(b), (c), (d), and (e)	None	These sections are not applicable since they pertain to Subpart Dc PM and opacity standards, SO ₂ emission limits, fuel oil sulfur limits, and percent reduction requirements, none of which are applicable.
§60.48c(f)	None	This section is not applicable since it pertains to supplier fuel certifications for various oils and coal (but not natural gas), none of which are combusted by the units.
§60.48c(g)(1)	5.4.5.	This section is applicable and requires the permittee to record and maintain records of the amount of fuel combusted during each operating day. This requirement was included in R13-2826I, condition 6.3.5.
§§60.48c(g)(2) and (3)	5.4.6. and 5.4.7.	The alternative monthly records allowed while meeting certain criteria specified in these sections are applicable and have been included in R13-2826I, conditions 6.3.6. and 6.3.7.
§60.48c(h)	None	This section is not applicable since the sources are not currently subject to a federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels.
§60.48c(i)	5.4.8.	This section is applicable and is written in the permit. It should be understood that this requirement does not relieve the permittee from keeping such Subpart Dc records for longer periods of time to meet other applicable requirements (e.g., permit condition 3.4.2.).
§60.48c(j)	None	This section is not applicable since none of the Subpart Dc periodic reporting requirements are applicable to the sources.

11. **40 C.F.R. 60 Subpart KKK – Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plant for which Construction, Reconstruction, or Modification Commenced after January 20, 1984, and on or before August 23, 2011.** This subpart applies to natural gas processing plants; a compressor in VOC service or wet gas service; and the group of all equipment except compressors within a process unit. Fort Beeler gas processing trains TXP1 and TXP2 meet the affected source criteria and were constructed within the applicability period specified in §60.630(b). As such, these sources are subject to the LDAR requirements in the regulation, which are set forth in permit section 9.0 as incorporated via permit R13-2826I.

Subpart KKK	Title V	Discussion
§60.630	9.1.1.	This section specifies the applicability of the regulation, which was included in R13-2826H, 10.1.1. (discussed above). Since it is included in the underlying NSR permit, the Title V includes this condition.
§60.631	None	This section specifies definitions, which are unnecessary for the Title V permit.
§60.632	9.1.2.	This section specifies the applicable standards, which were included in R13-2826I, 10.1.2.
§60.633	9.1.3.	This section specifies exceptions, which were included in R13-2826I, 10.1.3. However, the NSR permit reserved §60.633(f), which is currently utilized in the regulation for reciprocating compressors. The regulation language is included in the Title V permit.
§60.634	9.1.4.	This section specifies alternative means of emission limitation, which were included in R13-2826I, 10.1.4.
§60.635	9.4.1.	This section specifies recordkeeping requirements, which were included in R13-2826I, 10.2.1.
§60.636	9.5.1.	This section specifies reporting requirements, which were included in R13-2826I, 10.2.2.

According to technical correspondence¹, the Groves dehydration unit was first delivered on April 14, 2011. “First delivered” means the date permanent production equipment is in place and product is consistently flowing to sales lines, gathering lines, etc. It can be concluded based on the first delivery data that the Groves dehydration unit commenced construction prior to August 23, 2011, and thereby meets the applicability criterion in §60.630(b).

However, the Groves dehydration unit is not subject to NSPS Subpart KKK requirements as the dehydrator is not located at the Fort Beeler plant site. The dehydrator is located adjacent to Fort Beeler but on a different parcel of land than the Fort Beeler Gas Plant. The Fort Beeler Gas Plant is located on a parcel of land leased by Williams and the Groves dehydration unit is located on a different parcel of land owned by Williams. The producer that sends natural gas to Groves is located between Fort Beeler and Groves. Although the facilities are close enough to have their emissions aggregated for regulatory program applicability purposes, because the two sites are separate, there is one permit for Fort Beeler and one permit for Groves. As stated in §60.630(e), *a compressor station, dehydration unit, sweetening unit, underground storage tank, field gas gathering system, or liquefied natural gas unit is covered by this subpart if it is located at an onshore natural gas processing plant. If the unit is not located at the plant site, then it is exempt from the provisions of this subpart.*

¹ Response from the permittee dated March 13, 2015 and e-mailed to the writer on March 14, 2015.

12. **40 C.F.R. 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.** The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in 40 C.F.R. §§60.4230(a)(1) through (6). For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator. According to Attachment E in the application, the permittee owns and operates the following SI RICE:

Em. Unit ID	Description	Design Capacity	Subpart JJJJ Applicable
CE-01	Caterpillar G342NA, natural gas-fired, 4SRB, Compressor Engine	225 HP	No
CE-02	Caterpillar G398-TA, natural gas-fired, 4SRB, Compressor Engine	625 HP	No
CE-03	Caterpillar G3612 LE, natural gas-fired, 4SLB, Compressor Engine	3,550 HP	No
CE-04	Caterpillar G3612 LE, natural gas-fired, 4SLB, Compressor Engine	3,550 HP	No
CE-05	Caterpillar G3612 LE, natural gas-fired, 4SLB, Compressor Engine	3,550 HP	No
GE-01	Olympian G70LG, natural gas- or propane-fired, 4SRB, Emergency Generator Engine	118 HP	Yes

40 C.F.R. §§60.4230(a)(1) through (3) are specifically for manufacturers and place no requirement directly upon the permittee as owner/operator; therefore, these requirements are not included in the permit. 40 C.F.R. §§60.4230(a)(4) through (6) are for owners and operators.

Non-applicability to Engines CE-01 through CE-05

This subpart does not apply to engines CE-01 and CE-02 because (according to the application) their construction was commenced before June 12, 2006 (cf. §60.4230(a)(4)).

This subpart does not apply to engines CE-03, CE-04, and CE-05 because (according to the application) they were manufactured before July 1, 2007 (cf. §60.4230(a)(4)(i)).

40 C.F.R. §60.4230(a)(5) does not apply to any ICE at the facility because none of them have been modified or reconstructed.

Applicability to Emergency Generator Engine GE-01

This subpart **is applicable** to the four-stroke rich-burn (4SRB) engine GE-01 that drives the Olympian G70LG Emergency Generator because it was manufactured after January 1, 2009; is utilized as an emergency engine; and has a maximum engine power greater than 25 HP (cf. §60.4230(a)(4)(iv)). The engine is subject to the emission standards in §60.4233(c) or §60.4233(e), depending on whether propane or natural gas is used as fuel. Engine GE-01 does not utilize an air pollution control device (APCD).

§60.4233(c) applies when combusting LPG (propane), and requires compliance with emission standards in §60.4231(c). Within §60.4231(c), the second statement is applicable, which requires **manufacturer certification** of the emergency stationary SI ICE between 25-hp and 130-hp that are rich burn combusting LPG. In this case, the applicable date in §60.4230(a)(4) is January 1, 2009, specified in §60.4230(a)(4)(iv) for an emergency generator greater than 25 HP. Thus, such an engine manufactured on or after that date is subject to this certification. Engine GE-01 was manufactured after this date; therefore, it must be **certified by the manufacturer for combusting LPG**. Section 5.1.11. of R13-2826I incorporates applicable requirements in §60.4234 to achieve compliance with the emission standards over the entire life of the engine. Therefore, Title V condition 4.1.11. is a logical location to incorporate this applicable standard into the operating permit. In this case, applicable

regulation language in §60.4231(c) is the second sentence regarding the certification which is included in the permit condition table.

§60.4233(e) applies when combusting natural gas, and requires compliance with the applicable emission standards in Table 1 to Subpart JJJJ. In Table 1, the emission limitations for emergency SI ICE between 25-hp and 130-hp are 10 g/HP-hr of NO_x + HC, and 387 g/HP-hr of CO. Even though permit R13-2826I did not specifically include these applicable limits, as discussed above it did include the requirement in §60.4234. Therefore, these applicable limits are also incorporated into the operating permit in condition 4.1.11.

Other requirements include certain monitoring, testing, recordkeeping, and reporting. Further, compliance with the applicable requirements in NSPS Subpart JJJJ is the means of demonstrating compliance with applicable regulation 40 C.F.R. 63 Subpart ZZZZ (discussed below) for GE-01.

§60.4234 is applicable and requires the permittee to operate and maintain GE-01 to achieve the applicable emission standards in §60.4233 over the entire life of the engine. Refer to section 5.1.11. of R13-2826I that is incorporated into the operating permit as condition 4.1.11.

§60.4237(c) is applicable and requires installation of a non-resettable hour meter on emergency engine GE-01. Refer to section 5.1.10. of R13-2826I that is incorporated into the operating permit as condition 4.1.10.

§60.4243(a) is applicable since the certification standards in §60.4233(c) are applicable for combustion of LPG. In particular, the operational standards in §60.4243(a)(1) apply, and the non-certified operation requirements in §60.4243(a)(2)(ii) for engines between 100-hp and 500-hp would apply if GE-01 were ever operated in that manner. These applicable requirements were not included in R13-2826I, but such operation in a non-certified manner was taken into account in section 5.4.6.a.4. of R13-2826I. Due to these facts, these applicable requirements are included in the operating permit as condition 4.1.19.

§60.4243(b) is applicable since GE-01 is considered a non-certified engine while combusting natural gas. The language in §60.4243(b)(1) is not applicable since GE-01 complies under §60.4233(c) for the certified manner (combusting LPG) and not under §60.4233(d) as specified in §60.4243(b). The language in §60.4243(b)(2)(ii) is not applicable since GE-01 is not greater than 500 hp. Refer to operating permit condition 4.1.24.

§60.4243(d) is applicable since GE-01 is an emergency stationary ICE. R13-2826I, section 5.1.12. included the requirements of this section; however, the regulation language has been revised since it was first written in the NSR permit. The operating permit will include the current and applicable language from the NSPS. The requirements of §§60.4243(d)(2)(ii) and (iii), and §60.4243(d)(3)(i) are excluded since the permittee stated in technical correspondence that the engine is not operated in the manners prescribed in these sections of the regulation. Refer to operating permit condition 4.1.12.

§60.4243(e) is applicable since GE-01 is a natural gas-fired engine that may operate on propane. However, because GE-01 is certified for combustion of propane the last statement in the section requiring performance testing for non-certified engines is not included in permit condition 4.1.20.

§60.4243(f) is an applicable performance testing requirement if GE-01 is not operated in a certified manner, which is also accounted for in sections 5.3.1. and 5.4.6.a.4. of R13-2826I (conditions 4.3.1. and 4.4.6.a.4.). Refer to permit condition 4.3.2.

§§60.4244(a) - (g) are applicable if GE-01 is not operated in a certified manner. These requirements have already been incorporated into the operating permit as condition 4.3.1. under permit R13-2826I, section 5.3.1.

§60.4245(a) is applicable to GE-01 and has been incorporated into the operating permit as condition 4.4.6. under permit R13-2826I, section 5.4.6.

§60.4245(b) is applicable recordkeeping of the hours of operation of GE-01 using a non-resettable hour meter required under §60.4237(c) (condition 4.1.10.). Refer to permit condition 4.4.8.

§60.4245(d) is applicable for GE-01 since it is subject to performance testing if operated in a non-certified manner. Refer to permit condition 4.5.5. A parenthetical reference to the specific performance testing in conditions 4.3.1. and 4.3.2. is added to condition 4.5.5. to specify what type of performance testing this requirement pertains to, and to clarify that such testing is due to operating GE-01 in a non-certified manner as those performance testing conditions specify.

Other requirements in Subpart JJJJ do not apply to GE-01 for one or more of the following reasons:

- The requirement is for manufacturers of engines, rather than owners and operators.
- The requirement is for an engine with a horsepower rating which is not applicable to GE-01.
- The requirement is for an engine combusting fuel that GE-01 does not combust.
- The requirement is for an APCD or an engine equipped with an APCD.
- The requirement is for a non-emergency type engine.
- The requirement is for a modified or reconstructed engine.
- The requirement is for a mobile source engine.

13. **40 C.F.R. 60 Subpart OOOO – Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution.** This subpart establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO₂) emissions from affected facilities that commence construction, modification or reconstruction after August 23, 2011. A permittee is subject to the applicable provisions of this subpart if the permittee is the owner or operator of one or more of the onshore affected facilities listed in §§60.5365 (a) through (g). In this case, the affected facility to which this subpart applies is the group of all equipment, except compressors, within a process unit, as specified in §60.5365(f). The Fort Beeler Gas Processing Plant is a natural gas processing plant that was modified after August 23, 2011. Therefore, Leak Detection and Repair (LDAR) requirements for onshore natural gas processing plants are applicable to the Fort Beeler Gas Processing Plant.

According to technical correspondence², the construction of Groves Dehydration Station commenced before August 23, 2011, and it has not been modified or reconstructed after this date; therefore, Groves is not subject to Subpart OOOO (cf. §60.5365). Specifically, none of the onshore affected facilities listed in §§63.5365(a) through (g) have been constructed after the applicability date at Groves. However, should one or more of the onshore affected facilities listed in §§63.5365(a) through (g) be constructed, then that particular affected facility would be subject to Subpart OOOO.

Some of the affected facilities and equipment listed in the regulation are not located at the Fort Beeler Gas Processing Plant. However, certain affected facilities and equipment are subject to the requirements of this subpart for the reasons given below.

² Response from the permittee dated March 13, 2015 and e-mailed to the writer on March 14, 2015.

§60.5365(a) - Each gas well affected facility, which is a single natural gas well.

There are no gas wells at either facility. Therefore, all requirements regarding gas well affected facilities under 40 C.F.R. 60 Subpart OOOO do not apply.

§60.5365(b) - Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals that is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. For the purposes of this subpart, your centrifugal compressor is considered to have commenced construction on the date the compressor is installed (excluding relocation) at the facility. A centrifugal compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

There are no centrifugal compressors at either facility. Therefore, all requirements regarding centrifugal compressors under 40 C.F.R. 60 Subpart OOOO do not apply.

§60.5365(c) - Each reciprocating compressor affected facility, which is a single reciprocating compressor located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. For the purposes of this subpart, your reciprocating compressor is considered to have commenced construction on the date the compressor is installed (excluding relocation) at the facility. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

There are reciprocating compressors (CM-01 through CM-07; each electrically driven) located at the Fort Beeler Gas Processing Plant that were constructed after August 23, 2011. Therefore, the requirements for reciprocating compressors under 40 C.F.R. 60 Subpart OOOO are applicable to compressors CM-01 through CM-07. The permittee will be required to perform the following:

- *Replace the reciprocating compressor rod packing at least every 26,000 hours of operation or 36 months.*
- *Demonstrate initial compliance by continuously monitoring the number of hours of operation or track the number of months since the last rod packing replacement.*
- *Submit the appropriate start up notifications.*
- *Submit the initial annual report for the reciprocating compressors.*
- *Maintain records of hours of operation since last rod packing replacement, records of the date and time of each rod packing replacement, and records of deviations in cases where the reciprocating compressor was not operated in compliance.*

Consistent with the emissions summary in the Engineering Evaluation for permit R13-3212, the permittee has grouped the rod packing and crankcase emissions into one emission unit ID RPC for the compressors CM-01 through CM-07. Similarly, the emissions due to their startup, shutdown, and maintenance is emission unit ID SSM. Specifically, SSM emissions are the sum of unburned fuel resulting from "cold-start" of idle gas-fired engines and natural gas that is purged (aka blowdown) from the compressors and associated piping and equipment. SSM emissions occur from units CE-01 through CE-05 and CM-01 through CM-07. The blowdown gas from the compressors driven by electric motors (CM-02 thru CM-07) is routed to the Old Process Flare (FL-01).

*According to technical correspondence³, the reciprocating compressors **CE-01 through CE-05** are not subject to **Subpart OOOO** because their individual construction dates are before August 23, 2011.*

There are no reciprocating compressors at the co-located Groves Dehydration Station.

§60.5365(d) - Pneumatic Controllers. Each pneumatic controller affected facility, which is a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 scfh which commenced construction after August 23, 2011, and is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment and not located at a natural gas processing plant.

All pneumatic controllers at the Fort Beeler Gas Processing Plant will be air-driven. As such, there are no natural gas-driven pneumatic controllers which commenced construction after August 23, 2011, that are subject to this section of the regulation. Therefore, all requirements regarding pneumatic controllers under 40 C.F.R. 60 Subpart OOOO do not apply to the Fort Beeler Gas Processing Plant.

The construction of Groves Dehydration Station (including the pneumatic controllers) commenced before August 23, 2011. Therefore, the pneumatic controllers at the Groves Dehydration Station are not subject to Subpart OOOO.

§60.5365(e) - Each storage vessel affected facility, which is a single storage vessel, located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment. 40 C.F.R. 60 Subpart OOOO defines a storage vessel as a unit that is constructed primarily of nonearthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provides structural support and is designed to contain an accumulation of liquids or other materials. The following are not considered storage vessels:

- Vessels that are skid-mounted or permanently attached to something that is mobile (such as trucks, railcars, barges or ships), and are intended to be located at a site for less than 180 consecutive days. If the source does not keep or is not able to produce records, as required by §60.5420(c)(5)(iv), showing that the vessel has been located at a site for less than 180 consecutive days, the vessel described herein is considered to be a storage vessel since the original vessel was first located at the site.
- Process vessels such as surge control vessels, bottoms receivers or knockout vessels.
- Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere.

This rule requires that the permittee determine the VOC emission rate for each storage vessel affected facility utilizing a generally accepted model or calculation methodology within 30 days of startup, and minimize emissions to the extent practicable during the 30 day period using good engineering practices. For each storage vessel affected facility that emits more than 6 tpy of VOC, the permittee must reduce VOC emissions by 95% or greater within 60 days of startup. The compliance date for applicable storage vessels is October 15, 2013.

The storage vessels located at the Fort Beeler Gas Processing Plant have a potential to emit that is less than 6 tpy of VOC. Therefore, the permittee is not required by this section to further reduce VOC emissions by 95%.

³ Response from the permittee dated March 13, 2015 and e-mailed to the writer on March 14, 2015.

The storage vessels located at the co-located Groves Dehydration Station have a potential to emit that is less than 6 tpy of VOC. Therefore, the permittee is not required by this section to further reduce VOC emissions by 95%.

§60.5365(f) - The group of all equipment, except compressors, within a process unit is an affected facility.

- Addition or replacement of equipment for the purpose of process improvement that is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.
- Equipment associated with a compressor station, dehydration unit, sweetening unit, underground storage vessel, field gas gathering system, or liquefied natural gas unit is covered by §§60.5400, 60.5401, 60.5402, 60.5421 and 60.5422 of this subpart if it is located at an onshore natural gas processing plant. Equipment not located at the onshore natural gas processing plant site is exempt from the provisions of §§60.5400, 60.5401, 60.5402, 60.5421 and 60.5422 of this subpart.
- The equipment within a process unit of an affected facility located at onshore natural gas processing plants and described in paragraph (f) of this section are exempt from this subpart if they are subject to and controlled according to subparts VVa, GGG or GGGa of this part.

*The Fort Beeler Gas Processing Plant is a natural gas processing plant. Therefore, Leak Detection and Repair (LDAR) requirements for onshore natural gas processing plants apply. Due to the applicability dates, the **Inlet and TXP3 processing train are subject to the LDAR requirements of this section of Subpart OOOO**. Due to their construction dates, the processing trains TXP1 and TXP2 are subject to the LDAR requirements of 40 C.F.R. 60 Subpart KKK (previously discussed in this Fact Sheet).*

The permittee must meet the Leak Detection and Repair (LDAR) requirements of Subpart OOOO for the Inlet and processing train TXP3, which includes the provisions referenced in 40 C.F.R. 60, Subpart VVa. Substantively, Subpart VVa defines a leak (and triggers repair procedures) when pollutant concentrations are detected in excess of 500 ppmv.

The Groves Dehydration Station is not a natural gas processing plant as defined in §60.5430; therefore, the requirements of this section are not applicable specifically to this station.

§60.5365(g) - Sweetening units located at onshore natural gas processing plants that process natural gas produced from either onshore or offshore wells.

There are no sweetening units at either facility. Therefore, all requirements regarding sweetening units under 40 C.F.R. 60 Subpart OOOO do not apply.

In summary, affected facilities at the Fort Beeler Gas Processing Plant are subject to substantive requirements in the following sections of the regulation:

- **§60.5365(c) – Rod packing replacement for reciprocating compressors CM-01 through CM-07 (see permit section 4.0);**
- **§60.5365(f) – LDAR for Inlet and TXP3 processing trains (see permit section 10.0).**

The Table OOOO describes how the applicable requirements are incorporated into the Title V permit. Where occurring, the regulation language “this subpart” is changed to “40 C.F.R. 60 Subpart OOOO” in the permit condition unless otherwise noted.

Table OOOO

Subpart OOOO	Title V	Discussion
Compliance Date		
§60.5370(a)	10.1.1. 10.1.6. 4.1.18.	In this case the applicable compliance date is upon startup. The requirement is already contained incorporated via permit R13-2826I. The compliance date (October 15, 2012 or upon startup) is built into the applicable substantive requirement to periodically replace the rod packing. Therefore, this section for compliance date is cited with the standard for one consolidated permit condition.
§60.5370(b)	10.1.8.	This section specifies that the exemption from compliance during SSM events provided for in §60.8(c) do not apply to Subpart OOOO. As such, this provision applies to the equipment leak standards for the Inlet and TXP3 process trains, and is therefore included in permit section 10.0. Such an exemption is not congruent with the applicable requirement to change the reciprocating compressor rod packing every 26,000 hours. Therefore, this requirement is not included in permit section 4.0.
§60.5370(c)	10.1.2.	The requirement is already contained incorporated via permit R13-2826I.
Standards for Affected Facilities		
§60.5375	None	There are no gas wells at the facility.
§60.5380	None	There are no centrifugal compressors at the facility.
§60.5385	4.1.18.	This substantive requirement to periodically replace the rod packing for reciprocating compressors applies to compressor CM-01 through CM-07. Their aggregate rod packing and crankcase emission unit is designated as RPC.
§60.5390	None	All pneumatic controllers at the Fort Beeler Gas Processing Plant will be air-driven. As such, there are no natural gas-driven pneumatic controllers which commenced construction after August 23, 2011, that are subject to this section of the regulation. The construction of Groves Dehydration Station (including its pneumatic controllers) commenced before August 23, 2011. Therefore, the pneumatic controllers at the Groves Dehydration Station are not subject to Subpart OOOO.
§60.5395	None	The storage vessels located at the Fort Beeler Gas Processing Plant are not affected sources as demonstrated above in the discussion of §60.5365(e). Therefore, this section does not apply.
§60.5400	10.1.3.	The equipment leak standards have been incorporated via permit R13-2826I, requirement 11.1.3.
§60.5401	10.1.4.	The exceptions to the equipment leak standards have been incorporated via permit R13-2826I, requirement 11.1.4.
§60.5402	10.1.5.	The alternative emission limitations for equipment leak standards have been incorporated via permit R13-2826I, requirement 11.1.5.
§§60.5405-60.5408	None	There are no sweetening units at either facility. Therefore, all requirements regarding sweetening units under 40 C.F.R. 60 Subpart OOOO do not apply.
§60.5410(a)	None	There are no gas wells at the facility.
§60.5410(b)	None	There are no centrifugal compressors at the facility.

Subpart OOOO	Title V	Discussion
§60.5410(c)	4.2.5.	This initial compliance demonstration requirement for reciprocating compressors applies to compressor rod packing and crankcase emissions designated as emission unit RPC; therefore, it is written in the permit. According to technical correspondence ⁴ , the permittee is complying with the standard to replace the rod packing before reaching 26,000 hours as prescribed in §60.5385(a)(1). Since the permittee did not elect to comply using the rod packing emissions collection system under §60.5385(a)(3), this section §60.5411(c)(2) is not applicable and is excluded from the permit condition.
§60.5410(d)	None	The pneumatic controllers do not meet the regulation applicability criteria as demonstrated in the discussion of §60.5365(d) above; therefore, this section is not applicable.
§60.5410(e)	None	This section of the regulation is reserved.
§60.5410(f)	10.1.6.	This section is applicable to the LDAR for Inlet and TXP3 processing trains; therefore, the requirement is included in the permit.
§60.5410(g)	None	There are no sweetening units at either facility.
§60.5410(h)	None	The storage vessels located at the Fort Beeler Gas Processing Plant are not affected sources as demonstrated above in the discussion of §60.5365(e). Therefore, this section does not apply.
§60.5410(i)	None	There are no Group 1 storage vessel (as defined in §60.5430) affected facilities at Fort Beeler; therefore, this section is not applicable.
§60.5411(a)	None	The requirements of this section apply to a closed vent system that may be utilized to collect rod packing emissions from reciprocating compressors. Since the permittee did not elect to comply using the rod packing emissions collection system under §60.5385(a)(3), this section §60.5411(a) is not applicable.
§60.5411(b)	None	There are no storage vessel or centrifugal compressor affected facilities at Fort Beeler; therefore, this section is not applicable.
§60.5411(c)	None	There are no storage vessel affected facilities at Fort Beeler; therefore, this section is not applicable.
§60.5412	None	There are no storage vessel or centrifugal compressor affected facilities at Fort Beeler; therefore, this entire section is not applicable.
§60.5413	None	There are no storage vessel or centrifugal compressor affected facilities at Fort Beeler; therefore, this entire section is not applicable.
§60.5415(a)	None	There are no gas wells at the facility.
§60.5415(b)	None	There are no centrifugal compressors at the facility.
§60.5415(c)	4.2.6.	This continuous compliance demonstration requirement for reciprocating compressors applies to compressor rod packing and crankcase emissions designated as emission unit RPC; therefore, it is written in the permit. The non-applicable requirement §60.5415(c)(4) for a rod packing emissions collection system is excluded.
§60.5415(d)	None	The pneumatic controllers do not meet the regulation applicability criteria as demonstrated in the discussion of §60.5365(d) above; therefore, this section is not applicable.
§60.5415(e)	None	The storage vessels located at the Fort Beeler Gas Processing Plant are not affected sources as demonstrated above in the discussion of §60.5365(e). Therefore, this section does not apply.

⁴ Response from the permittee dated March 13, 2015 and e-mailed to the writer on March 14, 2015.

Subpart OOOO	Title V	Discussion
§60.5415(f)	10.1.7.	This applicable requirement is for continuous compliance with VOC requirements for affected facilities at an onshore natural gas processing plant.
§60.5415(g)	None	There are no sweetening units at either facility.
§60.5416	None	The requirements of this section apply to a closed vent system that may be utilized to collect rod packing emissions from reciprocating compressors. Since the permittee did not elect to comply using the rod packing emissions collection system under §60.5385(a)(3), the entire section is not applicable.
§60.5417	None	There are no storage vessel or centrifugal compressor affected facilities at the plant.
Notification, Reporting, and Recordkeeping Requirements		
§60.5420(a)	4.5.3. 10.5.2.	This notification requirement is applicable when an affected facility specified in §60.5365 is constructed, modified, or reconstructed during the reporting period; therefore, the requirement is included in the permit in both sections 4.0 and 10.0 for the reciprocating compressors and Inlet and TXP3 processing trains, respectively. Since there are no immediate plans that would trigger this requirement, the affected facility-specific provisions in §§60.5420(a)(1) and (2) are not included in the permit conditions.
§60.5420(b)	4.5.4.	This reporting requirement is applicable to the reciprocating compressors; however, only the specific applicable sections §§60.5420(b), (b)(1), (b)(4), and (b)(7)(ii) are written in permit condition 4.5.4. for the compressors. In the case of the Inlet and TXP3 processing trains, they are subject to the requirement to submit semi-annual reports under the applicable NSPS Subpart VVa requirements incorporated by reference in §60.5422(a) (see below), which is contained in permit condition 10.5.1.(a). In particular, the fugitive sources Inlet and TXP3 processing trains must comply with semi-annual reporting requirements §§60.487a(a),(b), (c)(2)(i) through (iv), and (c)(2)(vii) through (viii). These fugitive sources are not among the point sources specified in §§60.5420(b)(1) through (6), and are not subject to reporting of performance test results in §§60.5420(b)(7) or (8) since the fugitive sources are not subject to performance testing under Subpart OOOO. Based upon these facts, the Inlet and TXP3 processing trains are not subject to the annual reporting requirements in §60.5420(b), but instead are subject to the more stringent frequency of the applicable requirements to submit semi-annual reports in accordance with §60.5422.
§60.5420(c)	4.4.7.	The recordkeeping requirements apply to multiple affected facilities. In this case, only §60.5420(c)(3) for the reciprocating compressors is applicable and is therefore written in the permit. The regulation language is changed from “paragraphs (c)(1) through (13) of this section” to “paragraph (c)(3) of §60.5420” for the permit condition. None of the specific requirements in §§60.5420(c)(1) through (13) are applicable to the Inlet and TXP3 processing trains; therefore, no corresponding condition is written in permit section 10.0.
§60.5421	10.4.1.	This recordkeeping requirement for affected facilities subject to VOC requirements is applicable to the Inlet and TXP3 processing trains, and has been incorporated into the permit via underlying NSR permit R13-2826I, condition 11.4.2.

Subpart OOOO	Title V	Discussion
§60.5422	10.5.1.	This reporting requirement for affected facilities subject to VOC requirements is applicable to the Inlet and TXP3 processing trains, and has been incorporated into the permit via underlying NSR permit R13-2826H, condition 11.4.3. This is the Subpart OOOO requirement for semi-annual reporting that incorporates by reference NSPS Subpart VVa.
§60.5423	None	There are no sweetening units at either facility.

14. **40 C.F.R. 63 Subpart HH – National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities.** This subpart establishes national emission limitations and operating limitations for HAPs emitted from oil and natural gas production facilities located at major and area sources of HAP emissions. The glycol dehydration unit at the Groves Dehydration Station is subject to the area source requirements for glycol dehydration units. However, because the facility is an area source of HAP emissions and the actual average benzene emissions from the glycol dehydration unit are below 0.90 megagram per year (1.0 tons/year) it is exempt from all requirements of Subpart HH (condition 12.1.6.) except to calculate and maintain records of actual average benzene emissions to demonstrate a continuous exemption status. Applicable requirement §63.774(d)(1)(ii) requires the permittee must maintain records of the actual average benzene emissions (in terms of benzene emissions per year). Refer to permit conditions 12.3.2., 12.4.2., and 12.4.3. The facility also must update its major source determination annually as specified in permit condition 12.1.5.

15. **40 C.F.R. 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.** Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

The Fort Beeler Gas Processing plant is an area source of HAP. The table below lists the affected engines at the facility.

Em. Unit ID	Em. Point ID	Emission Unit Description	Year Installed	Type	Design Cap. (hp)	Control Device
CE-01	1E	Caterpillar G342NA Compressor Engine	2010	SI 4SRB	225	01-NSCR
CE-02	2E	Caterpillar G398-TA Compressor Engine	2011	SI 4SRB	625	02-NSCR
CE-03	3E	Caterpillar G3612 LE Compressor Engine	2010	SI 4SLB	3,550	01-OxCat
CE-04	4E	Caterpillar G3612 LE Compressor Engine	2010	SI 4SLB	3,550	02-OxCat
CE-05	5E	Caterpillar G3612 LE Compressor Engine	2010	SI 4SLB	3,550	03-OxCat
GE-01	8E	Olympian G70LG Emergency Generator	2014	SI 4SRB	118	None

The engines CE-01 through CE-05 are considered *Existing stationary RICE* for Subpart ZZZZ since their construction was commenced before June 12, 2006 (cf. §63.6590(a)(1)(iii)).

The engine GE-01 is considered a *New stationary RICE* for Subpart ZZZZ since its construction was commenced after June 12, 2006 (cf. §63.6590(a)(2)(iii)).

According to the application the maximum operating schedule of each of the engines CE-01 through CE-05 is 8,760 hr/yr.

Remote Stationary RICE Classification

The application regulatory discussion states that the engines at Fort Beeler are considered *Remote stationary RICE*, as this term is defined in §63.6675. The determination that each engine at Fort Beeler meets the definition of “remote stationary RICE” is based on the Department of Transportation (DOT) pipeline classification. 49 CFR Part 192 defines various class locations and the pipeline segment at Fort Beeler meets the definition of Class I. Class I is “any class location that has 10 or fewer buildings intended for human occupancy” and a class location unit is “any onshore area that extends 220 yards on either side of the centerline of any continuous 1 mile length of pipeline”. The definition of *Remote stationary RICE* in §63.6675 is based on the Class I definition found in 49 C.F.R. Part 192. The pipeline map in application Attachment B demonstrates the presence of a Class I pipeline at the Fort Beeler Gas Processing Plant; therefore, the engines at Fort Beeler are considered (at the time of issuance of this initial Title V permit) remote stationary RICE for determining which requirements in Subpart ZZZZ are applicable to the engines. It will be further discussed below (in Limitations & Standards) that while generally meeting the discussed criteria to be a remote RICE, there are no remote RICE requirements that apply to engine CE-01. The “Remote stationary RICE” status must be reevaluated every 12 months, as specified in §63.6603(f), which will be further discussed below.

Engine CE-01

This engine is an *Existing stationary RICE* under §63.6590(a)(1)(iii). Since it is less than 500-hp and also existing, CE-01 does not qualify for limited requirements under §63.6590(b)(1). Since it is existing and due to its design capacity and fuel combusted, CE-01 does not qualify for limited requirements under §63.6590(b)(2). Since it is an existing, 4SRB, non-emergency, unlimited use engine at an area source that combusts natural gas, CE-01 does not qualify for limited requirements under §63.6590(b)(3). Since CE-01 is existing, it does not qualify for the requirements for *Stationary RICE subject to Regulations under 40 C.F.R. Part 60* in §63.6590(c).

Engine CE-02

This engine is an *Existing stationary RICE* under §63.6590(a)(1)(iii). Since it is existing, CE-02 does not qualify for limited requirements under §63.6590(b)(1). Since it is existing and due to the fuel combusted, CE-02 does not qualify for limited requirements under §63.6590(b)(2). Since it is an existing, 4SRB, non-emergency, non-limited use engine at an area source that combusts natural gas, CE-02 does not qualify for limited requirements under §63.6590(b)(3). Since CE-02 is existing, it does not qualify for the requirements for *Stationary RICE subject to Regulations under 40 C.F.R. Part 60* in §63.6590(c).

Engines CE-03, CE-04, and CE-05

These engines are *Existing stationary RICE* under §63.6590(a)(1)(iii). Since they are existing, they do not qualify for limited requirements under §63.6590(b)(1). Since they are existing and due to the fuel combusted, they do not qualify for limited requirements under §63.6590(b)(2). Since they are 4SRB, non-emergency, non-limited use engine at an area source that combusts natural gas, the engines do not qualify for limited requirements under §63.6590(b)(3). Since they are existing, they do not qualify for the requirements for *Stationary RICE subject to Regulations under 40 C.F.R. Part 60* in §63.6590(c).

Engine GE-01

According to the application, the maximum operating schedule for emergency generator GE-01 is 500 hr/yr. Therefore, it is not a *Limited use stationary RICE* as defined in §63.6675. Since it is less than 500-hp, GE-01 does not qualify for limited requirements under §63.6590(b)(1). Due to its design capacity and fuel combusted, GE-01 does not qualify for limited requirements under §63.6590(b)(2). Since it is considered new, GE-01 does not qualify for limited requirements under §63.6590(b)(3).

Since GE-01 is a new stationary RICE located at an area source of HAP, it meets the criteria for *Stationary RICE subject to Regulations under 40 CFR Part 60* in 40 C.F.R. §63.6590(c)(1). Being a spark ignition (SI) type engine, it must comply with 40 C.F.R. 63 Subpart ZZZZ by complying with 40 C.F.R. 60 Subpart JJJJ and no further requirements under Subpart ZZZZ apply to GE-01. Since MACT

Subpart ZZZZ is applicable, every NSPS Subpart JJJJ requirement applicable to GE-01 will also include the following citation “40 C.F.R. §§63.6590(c) and (c)(1); 45CSR34”. Refer to conditions 4.1.10., 4.1.11., 4.1.12., 4.1.19., 4.1.20., 4.3.1., 4.3.2., 4.4.6., 4.4.8., and 4.5.5.

Compliance Date

The applicable compliance date for existing stationary SI RICE at an area source of HAP is October 19, 2013, in accordance with §63.6595(a). Therefore, the affected engines CE-01 through CE-05 must be in compliance with Subpart ZZZZ at this time, and engine GE-01 must be in compliance upon startup.

Limitations & Standards

§63.6603(a) is applicable to engines CE-01 through CE-05. This requirement is in section 5.1.13. of R13-2826H, and has been included as operating permit condition 4.1.13. However, the NSR permit did not specify which requirements in Tables 2d and 2b of Subpart ZZZZ are applicable to the engines. Among the requirements in **Table 2d, Item 8 is applicable to engines CE-03 through CE-05** since they are non-emergency, non-black start 4SLB remote stationary RICE >500 HP. This requires a work/management practice consisting of an oil and filter change, and an inspection of certain engine components every 2,160 hours of operation or annually, whichever comes first. Refer to permit condition 4.1.21. **Table 2d, Item 10 is applicable to engine CE-01** since it is a non-emergency, non-black start 4SRB stationary RICE ≤500 HP. This requires the same work practice, but every 1,440 hours of operation or annually, whichever comes first. Refer to permit condition 4.1.22. As mentioned above, while it may meet the definition of a remote stationary RICE, engine CE-01 is not subject to remote stationary RICE requirements in Table 2d since none of the remote stationary RICE requirements apply to CE-01. Specifically, all of the remote stationary RICE requirements in Table 2d are for engines that are greater than 500 HP. **Table 2d, Item 11 is applicable to engine CE-02** since it is a non-emergency, non-black start 4SRB remote stationary RICE >500 HP. This requires the same work practice, but every 2,160 hours of operation or annually, whichever comes first. Refer to permit condition 4.1.23. Even though the allowable hours of operation are the same, conditions 4.1.21. and 4.1.23. were not combined in order to avoid confusion since the former applies to 4SLB and the latter to 4SRB engines, as well as the fact that these are specified in different Table 2d item numbers. All of the requirements in Table 2b are for new and reconstructed engines located at major sources and CI RICE, none of which apply to the existing SI engines CE-01 through CE-05. Based upon this fact, the language “and the operating limitations in Table 2b to 40 C.F.R. 63 Subpart ZZZZ” is excluded from permit condition 4.1.13. and a parenthetical reference is added to point to the permit conditions that contain the applicable work practice requirements.

§63.6603(f) is applicable to engines CE-02 through CE-05 since they are greater than 500 HP and have been determined to be remote engines at an area source. This annual reevaluation requirement has been included in section 5.1.14. of R13-2826I, and is in the operating permit as condition 4.1.14.

§63.6605(a) is applicable to engines CE-01 through CE-05, and has been included in section 5.1.15. of R13-2826I, and is operating permit as condition 4.1.15.

§63.6605(b) is applicable to engines CE-01 through CE-05, and has been included in section 5.1.16. of R13-2826I, and is operating permit as condition 4.1.16.

§63.6625(e) is applicable any RICE meeting the criteria in §63.6625(e)(1) through (10). Each of the criteria are examined below to determine if §63.6625(e) applies to any of the engines. This section applies to engine CE-01, and has been included in section 5.2.2. of R13-2826I, and is operating permit as condition 4.2.2. The NSR permit states the applicability to engines CE-01 through CE-05. However, as demonstrated below, the requirement applies only to CE-01 since it alone meets the criteria listed in §§63.6625(e)(1) through (10).

- §63.6625(e)(1) is an existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions.
 - This does not apply to any of the engines since they are all greater than 100 HP and are located at an area source.
- §63.6625(e)(2) is an existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions.
 - This does not apply to any of the engines since none are emergency (except GE-01, but it is subject to NSPS Subpart JJJJ and no further Subpart ZZZZ requirements such as this apply to it) or black start RICE and the facility is an area source.
- §63.6625(e)(3) is an existing emergency or black start stationary RICE located at an area source of HAP emissions.
 - This does not apply to any of the engines CE-01 through CE-05 since none are emergency type. Even though GE-01 is an emergency RICE, this does not apply to GE-01 since it is subject to NSPS Subpart JJJJ and no further Subpart ZZZZ requirements apply to it.
- §63.6625(e)(4) is an existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions.
 - This does not apply to any of the engines since none are CI RICE.
- §63.6625(e)(5) is an existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions.
 - This does not apply to any of the engines since none are 2SLB.
- §63.6625(e)(6) is an existing non-emergency, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.
 - This does not apply to any of the engines since none combust landfill or digester gas.
- §63.6625(e)(7) is an existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions.
 - This does not apply to CE-01 and CE-02 since they are 4SRB. Even though CE-03 through CE-05 are 4SLB, they are greater than 500 HP; therefore, §63.6625(e)(7) does not apply to them. This does not apply to GE-01 since it is 4SRB, and also since it is subject to NSPS Subpart JJJJ, no further Subpart ZZZZ requirements apply to it.
- **§63.6625(e)(8)** is an existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions.
 - **This applies to CE-01** since it is an existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions. However, these criteria do not apply to CE-02

since it is greater than 500 HP. Further, these criteria do not apply to CE-03 through CE-05 since they are 4SLB and greater than 500 HP. These criteria do not apply to GE-01 since it is emergency type, and also since it is subject to NSPS Subpart JJJJ and no further Subpart ZZZZ requirements apply to it.

- §63.6625(e)(9) is an existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.
 - This does not apply to CE-01 since it is 4SRB and less than 500 HP. This does not apply to CE-02 since it is 4SRB and is operated more than 24 hours per calendar year. §63.6625(e)(9) does not apply to CE-03 through CE-05 since they are operated more than 24 hours per calendar year. These criteria do not apply to GE-01 since it is emergency type, and also since it is subject to NSPS Subpart JJJJ and no further Subpart ZZZZ requirements apply to it.
- §63.6625(e)(10) is an existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.
 - This does not apply to CE-02 since it is operated more than 24 hours per calendar year. §63.6625(e)(10) does not apply to CE-03 through CE-05 since they are 4SLB and are operated more than 24 hours per calendar year. These criteria do not apply to GE-01 since it is emergency type, and also since it is subject to NSPS Subpart JJJJ and no further Subpart ZZZZ requirements apply to it.

Therefore, Title V permit condition 4.2.2. will only specify applicability to CE-01.

§63.6625(h) is applicable to engines CE-01 through CE-05, and has been included in section 5.2.3. of R13-2826I, and is in the operating permit as condition 4.2.3. Since the engines are not subject to requirements in Tables 1a, 2a, and 2c of Subpart ZZZZ, this language is excluded from the permit condition. A parenthetical reference to the applicable standards has been added.

§63.6625(j) is applicable to engines CE-01 through CE-05, and has been included in section 5.2.4. of R13-2826I, and is in the operating permit as condition 4.2.4.

§63.6640(a) is applicable to engines CE-01 through CE-05, and has been included in section 5.1.17. of R13-2826I, and is in the operating permit as condition 4.1.17. Since the engines are not subject to emission and operating limitations and requirements in Tables 1a, 1b, 2a, 2b, and 2c of Subpart ZZZZ, this language is excluded from the permit condition. A parenthetical reference to the applicable work practice standards has been added. The requirement also mentions “methods specified in Table 6”. Among the items in Table 6, only item 9 is applicable since it covers CE-01 as an “existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP” and engines CE-02 through CE-05 as “existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE” that are subject to work practices. Therefore, the language “Item 9 of” is added to condition 4.1.17. to specify the applicable requirements in Table 6.

Recordkeeping and Reporting

§63.6640(b) is applicable to engines CE-01 through CE-05, and has been included in section 5.1.19. of R13-2826I, and is in the operating permit as condition 4.5.2. Since the engines are not subject to emission and operating limitations and requirements in Tables 1a, 1b, 2a, 2b, and 2c of Subpart ZZZZ, this language is excluded from the permit condition. Parenthetical references to the applicable standards and reporting requirement have been added.

§63.6640(e) is applicable to engines CE-01 through CE-05, and has been included in section 5.1.18. of R13-2826I, and is operating permit condition 4.5.1.

§63.6645(a) is not applicable because it specifies Subpart A requirements that are not applicable to the engines. This section is not applicable for the following reasons:

- §63.7(b) – not applicable since not subject to performance testing.
- §63.7(c) – not applicable since not subject to performance testing.
- §63.8(e) – not applicable since not subject to continuous monitoring requirement.
- §63.8(f)(4) – not applicable since not subject to continuous monitoring requirement.
- §63.8(f)(6) – not applicable since not subject to continuous monitoring requirement.
- §63.9(b) – not applicable since source has not become a major source of HAP; startup was not before effective date of Subpart ZZZZ; and the engines are not reconstructed.
- §63.9(c) – not applicable since no extension is required or requested by the permittee.
- §63.9(d) – not applicable since the source is not subject to special compliance requirements.
- §63.9(e) – not applicable since not subject to performance testing.
- §63.9(g) – not applicable since not subject to continuous monitoring requirement.
- §63.9(h) – not applicable since a NOCS is not required because engines are not subject to emission limitations and operating limitations and are not subject to Subpart ZZZZ performance testing.

§63.6650(a) is not applicable because none of the criteria in the items of Table 7 to Subpart ZZZZ apply to the engines. Therefore, periodic compliance reports in Table 7 are not applicable.

§§63.6650(b) and (c) are not applicable because periodic compliance reports in Table 7 are not applicable.

§63.6650(f) is applicable since any deviations must be reported in the semi-annual monitoring report required in Title V boilerplate condition 3.5.6. Refer to permit condition 4.5.6.

§63.6655(a) is applicable to engines CE-01 through CE-05, and has been included in section 5.4.3. of R13-2826I, and is in the operating permit as condition 4.4.3.

§63.6655(d) is applicable to engines CE-01 through CE-05, and has been included in section 5.4.4. of R13-2826I, and is in the operating permit as condition 4.4.4. As discussed above regarding §63.6640(a), the specific Item 9 is added to the condition to specify the applicable requirements in Table 6 to Subpart ZZZZ.

§63.6655(e) is applicable to engines CE-01 through CE-05 since they are existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart specified in §63.6655(e)(3). The requirement has been included in section 5.4.5. of R13-2826I, and is in the operating permit as condition 4.4.5.

§§63.6660(a), (b), and (c) are applicable to engines CE-01 through CE-05, and have been included in the operating permit as condition 4.4.9.

Other requirements in Subpart ZZZZ do not apply to engines CE-01 through CE-05 for one or more of the following reasons:

- The requirement is for a horsepower rating which is not applicable to the engines.
- The requirement is for an engine located at a major source of HAP.
- The requirement is for a compression ignition (CI) engine.
- The requirement is to demonstrate compliance with, or is otherwise related to, emission or operating limits, to which the engine is not subject (e.g., performance testing, monitoring systems).
- The requirement pertains to an initial compliance demonstration, which in this case is not applicable.
- The requirement is for equipment not utilized, such as CMS, CEMS, and CPMS.
- The requirement is for an engine combusting fuel that the engines do not combust.
- The requirement is for an APCD or an engine equipped with an APCD.
- The requirement is for an emergency type engine.
- The requirement is for a reconstructed engine.

16. Source Aggregation Determination

As stated in the facility description of this Fact Sheet, the Groves Dehydration Station is co-located with the Fort Beeler Gas Processing plant. Due to their proximity and the fact that Williams controls both facilities, a determination regarding source aggregation must be made. This has been done in the Engineering Evaluations for NSR permits R13-2826H and R13-3212 from an NSR perspective of establishing a “stationary source” as defined in 45CSR§13-2.24. Below is a similar determination from the major source (Title V) permitting perspective.

45CSR§30-2.26 defines a “Major source” as “any stationary source (or any group of stationary sources that are located on one or more contiguous or adjacent properties, and are under common control of the same person (or persons under common control)) belonging to a single major industrial grouping and that is described in subdivisions 2.26.a, 2.26.b, or 2.26.c. For the purpose of defining “major source,” a stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to same Major Group (i.e., all have the same two-digit code) as described in the Standard Industrial Classification Manual, 1987....”

Based upon this definition the 3-prong test is:

- (1) Are the facilities located on one or more contiguous or adjacent properties;
- (2) Are the facilities under common control of the same person (or persons under common control); and

(3) Do the facilities belong to a single major industrial grouping?

Additionally, a Title V major source must be described by subdivisions 2.26.a, 2.26.b, or 2.26.c. of 45CSR30.

Contiguous or adjacent properties

The Groves dehydration station is not located on the Fort Beeler plant site. The Groves station is located adjacent to Fort Beeler but on a different parcel of land than the Fort Beeler Gas Plant. More specifically, the Fort Beeler Gas Plant is located on a parcel of land leased by Williams and the Groves dehydration unit is located on a different parcel of land owned by Williams. The aerial photograph⁵ below illustrates the proximity of the Groves Dehydration Station to the Fort Beeler Gas Plant.



“Contiguous or Adjacent” determinations are made on a case by case basis. These determinations are proximity based, and whether or not the facilities meet the common sense notion of a plant. The terms “contiguous” or “adjacent” are not defined by U.S. EPA. Contiguous has a dictionary definition of being in actual contact; touching along a boundary or at a point. Adjacent has a dictionary definition of not distant; nearby; having a common endpoint or border.

While not contiguous, the two facilities clearly are adjacent; therefore, this criterion is met.

Common control

Williams Ohio Valley Midstream LLC operates under its parent company, The Williams Companies, Inc., and is the sole operator of both the Fort Beeler Gas Processing Plant, and the Groves Dehydration Station. Hence, both facilities are under common control and this criterion is met.

⁵ The photograph was obtained on 5/21/2015 from Google Earth™ (Imagery Date: 9/5/2013). The facility names and coordinates were added by the writer.

Same major industrial grouping

The SIC code for both Fort Beeler and Groves is 1321 (natural gas liquid extraction). Moreover, all of the pollutant emitting activities belong to same Major Group (i.e., all have the same two-digit code “13” designating Oil and Gas Extraction); therefore, this criterion is met.

Rule Subdivisions within the Major Source Definition

45CSR§30-2.26.a. – The aggregated facilities do not have the potential to emit ten (10) tons per year (tpy) of a single listed HAP, or the potential to emit twenty-five (25) tpy of any combination of such HAPs. As such, the aggregate source does not meet the criteria of this subdivision of the rule.

45CSR§30-2.26.b. – The aggregated facilities have the potential to emit one hundred (100) tpy or more of volatile organic compounds (VOC), which is an air pollutant subject to regulation. As such, the aggregate source meets the criteria of this subdivision, and is a major source as defined in 45CSR§30-2.26.

At this point an analysis regarding 45CSR§30-2.26.c. is immaterial since the aggregate source meets the criteria of one of the three subdivisions.

Summary

The Fort Beeler Gas Processing Plant and Groves Dehydration Station are on adjacent properties; are under common control; have the same major industrial grouping; and their aggregated emissions of a regulated pollutant are greater than the major source threshold (155.87 tpy of VOC). Therefore, the emissions from the Fort Beeler Gas Processing Plant and Groves Dehydration Station have been aggregated for determining both major source status and potentially PSD status.

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 R13-2826I, 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 R13-2826H. 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 located 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. **45CSR21 – Control of VOC Emissions.** The facility is not located in Putnam, Kanawha, Cabell, Wayne, or Wood counties (45CSR§21-1.1.); therefore, this rule is not applicable.

- d. **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 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.
- e. **40 C.F.R. 60 Subpart D – Standards of Performance for Fossil-Fuel-Fired Steam Generators.** There is no fossil-fuel-fired steam generating unit greater than 250 MMBtu/hr (40 C.F.R. §60.40(a)(1)) at the site; therefore, this regulation is not applicable.
- f. **40 C.F.R. 60 Subpart Da – Standards of Performance for Electric Utility Steam Generating Units.** There is no electric utility steam generating unit greater than 250 MMBtu/hr (40 C.F.R. §60.40Da(a)(1)) at the site; therefore, this regulation is not applicable.
- g. **40 C.F.R. 60 Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.** There is no steam generating unit greater than 100 MMBtu/hr (40 C.F.R. §60.40b(a)) at the site; therefore, this regulation is not applicable.
- h. **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.** There is no tank at the facility that was constructed before May 19, 1978 (40 C.F.R. §60.110(c)); therefore, this regulation is not applicable.
- i. **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.** There is no tank at the facility that was constructed before July 23, 1984 (40 C.F.R. §60.110a(a)); therefore, this regulation is not applicable.
- j. **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.** Except for fourteen (14) pressure vessels, all of the tanks at the facility are less than 75 cubic meters (m³) (19,813 gallons) capacity; therefore, this regulation is not applicable to those tanks (§60.110b(a)). The fourteen (14) pressure vessels are designed to operate in excess of 204.9 kPa and without emissions to the atmosphere; therefore, this regulation is not applicable to the pressure vessels (§60.110b(d)(2)).
- k. **40 C.F.R. 60 Subpart GG – Standards of Performance for Stationary Gas Turbines.** There is no stationary gas turbine at the facility (40 C.F.R. §60.330(a)); therefore, this regulation is not applicable.
- l. **40 C.F.R. 60 Subpart LLL – Standards of Performance for SO₂ Emissions From Onshore Natural Gas Processing for Which Construction, Reconstruction, or Modification Commenced After January 20, 1984, and on or Before August 23, 2011.** There is no sweetening unit at the facility (40 C.F.R. §60.640(a)); therefore, this regulation is not applicable.

- m. **40 C.F.R. 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.** There is no compression ignition engine at the facility (40 C.F.R. §60.4200(a)); therefore, this regulation is not applicable.
- n. **40 C.F.R. 60 Subpart KKKK – Standards of Performance for Stationary Combustion Turbines.** There is no stationary combustion turbine at the facility (40 C.F.R. §60.4305(a)); therefore, this regulation is not applicable.
- o. **40 C.F.R. 63 Subpart HHH – National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities.** There are no natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user. Further, the facility is an area source of HAP (40 C.F.R. §63.1270(a)). Therefore, this regulation is not applicable.
- p. **40 C.F.R. 63 Subpart YYYY – National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines.** There is no stationary combustion turbine at the facility (40 C.F.R. §§63.6080(a) and 63.6085); therefore, this regulation is not applicable.
- q. **40 C.F.R. 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.** The facility is not a major source of HAP (40 C.F.R. §63.7480); therefore, this regulation is not applicable.
- r. **40 C.F.R. 63 Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources.** There are only gas-fired boilers at the facility which are not subject to requirements of this regulation (40 C.F.R. §63.11195(e)); therefore, this regulation is not applicable.
- s. **40 C.F.R. Part 64 – Compliance Assurance Monitoring.** Although there are potential pollutant specific emission units subject to an emissions limitation, and a control device (i.e., Process Flare FL-02) is used to achieve compliance, the potential pre-control emissions of each pollutant do not exceed the respective major source threshold for these sources. Therefore, CAM is not applicable since the applicability criterion in 40 C.F.R. §64.2(a)(3) is not met.

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: August 24, 2015
Ending Date: September 23, 2015

Point of Contact

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

Denton B. McDerment, P.E.
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1221 • Fax: 304/926-0478
denton.b.mcderment@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)

Public Comments

On September 22, 2015, the permittee submitted the three following comments via e-mail. The DAQ response follows each comment.

Comment #1 Requirement 4.2.2

You are correct that §63.6625(e) does not specifically identify existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE. Williams found these engines were listed in Table 6 to NESHAP Subpart ZZZZ (see #9 in the table). In §63.6640(a), the rule requires us to follow Table 6. In Table 6, it states that existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE are subject to the following continuous compliance demonstration requirement [see §63.6640(a)]:

Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan, which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

This appears to be a disconnect in ZZZZ between §63.6625(e) and Table 6. Williams believes that either engine CE-02 through CE-05 should be added to 4.2.2 or a new requirement should be added to include these engines referencing table 6.

DAQ Response to Comment #1

Permit condition 4.1.17. specifies that engines CE-01 through CE-05 are subject to the requirements in Item 9 of Table 6 to 40 C.F.R. 63 Subpart ZZZZ. Therefore, the requested change is not necessary.

Comment #2

Please clarify in 12.3.1 that the 180 days to for initial wet gas sample was a requirement of R13-3212 and should be on that time frame.

DAQ Response to Comment #2

Language has been added in parentheses to clarify that the time frame is from the issuance of R13-3212 and that the time frame ended on June 14, 2015.

Comment #3

Section 12.4.3 to include applicable recordkeeping requirement of the actual average benzene emissions is duplicative of the existing Section 12.4.2, which already requires records of the annual GRI-GLYCalc emission estimates. The actual average benzene emission comes from the GRI-GLYCalc emission estimates.

DAQ Response to Comment #3

While conditions 12.4.2. and 12.4.3. may be similar, 12.4.3 is the applicable language taken directly from the regulation and is more specific with regard to the benzene calculation than the paraphrased NSR permit requirement in 12.4.2.. Condition 12.4.3. states that the benzene emissions are to be determined in accordance with §63.772(b)(2), which provides two options: (i) GRI-GLYCalc™ version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual; or (ii) the permittee shall determine an average mass rate of benzene through direct measurement using the methods in §63.772(a)(1)(i) or (ii), or an alternative method according to §63.7(f). With regard to utilizing GRI-GLYCalc™ the requirement of the regulation is more specific than the NSR permit requirement. Further, in the case of Groves Dehydration Station, the recordkeeping of actual average benzene emissions is the substantive requirement, and the exemption from all other potentially applicable Subpart HH requirements is dependent upon this applicable recordkeeping requirement. Moreover, retaining both permit conditions places no additional recordkeeping burden on the permittee. For these reasons conditions 12.4.2. and 12.4.3. will be retained as written in the draft operating permit.

U.S. EPA Comments

No comments were received from U.S. EPA.