West Virginia Department of Environmental Protection Division of Air Quality

Fact Sheet



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

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on November 29, 2016.

Permit Number: **R30-01700027-2016**Application Received: **August 6, 2018**Plant Identification Number: **03-54-017-00027**Permittee: **EQM Gathering Opco, LLC**

Facility Name: **Saturn Compressor Station**Mailing Address: **625 Liberty Avenue, Suite 1700, Pittsburgh, PA 15222**

Permit Action Number: MM01 Revised: October 23, 2018

Physical Location: Central Station, Doddridge County, West Virginia

UTM Coordinates: 515.528 km Easting • 4,349.752 km Northing • Zone 17

Directions: From Parkersburg, WV take US-50 East for approximately 42 miles.

Turn left onto Willhelm Run Road and continue onto Stone Valley Road for approximately 2.0 miles. Take a sharp left into the entrance to the

station.

Facility Description

The Saturn Compressor Station is an existing natural gas gathering facility covered by Standard Industrial Classification (SIC) 1311. Natural gas and liquids (mostly produced water) from nearby wells undergo compression and dehydration before it is transported to a gas gathering line for additional processing. The station consists of a total of seven (7) natural gas fired reciprocating engines, three (3) triethylene glycol (TEG) dehydration units each controlled with a thermal oxidizer, three (3) dehydrator reboilers, five (5) natural gas fired microturbines for generating electricity, four (4) pipeline liquid (condensate) tanks controlled with one (1) thermal oxidizer, five (5) fuel gas heaters and other miscellaneous storage tanks of various sizes.

This modification incorporates the changes associated with permit R13-3150B to replace three (3) existing engines with three (3) "like kind" compressor engines. This modification also includes the changes associated with permit R13-3150A and contained in R13-3150B but not previously included in the Title V permit. The changes associated with permit R13-3150A are to increase throughputs for three (3) thermal oxidizers, to increase the dehydration capacity for two (2) dehydration units, to permit thermal oxidizer TO-4 as a non-emergency unit and to install one (1) methanol storage tank. The changes also included the removal of Heaters 1 and 2, and tanks T07, T20, T21, T22 and T23.

Emissions Summary

Permit R13-3150A was a permit modification to R13-3150 resulting in emission increases for NO_x , CO, SO_2 , PM, PM_{10} and $PM_{2.5}$. R13-3150A was issued on May 12, 2017 after the initial Title V permit (R30-01700027-2016) was issued. However, the application for the initial Title V permit was received on the same day as the application for permit R13-3150A and it had already included the PTE increases associated with R13-3150A. Since there are no changes in emissions with the engine replacements in R13-3150B, there are no changes in PTE associated with this minor modification.

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 126 tpy of NO_x, 137 tpy of VOC, 12 tpy of formaldehyde and 33 tpy of total HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, EQM Gathering Opco, LLC's Saturn Compressor Station is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State	Federal	and	State:
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45CSR6	Control Of Air Pollution From Combustion Of Refuse.		
45CSR13	Permits For Construction, Modification, Relocation An		
	Operation Of Stationary Sources Of Air Pollutants,		
	Notification Requirements, Administrative Updates,		
	Temporary Permits, General Permits, And Procedures For		
	Evaluation		
45CSR16	Standards Of Performance For New Stationary Sources		
45CSR30	Operating permit requirement.		
45CSR34	Emission Standards for Hazardous Air Pollutants		
40 C.F.R. Part 60, Subpart JJJJ	Standards of Performance for Stationary Spark Ignition		
	Internal Combustion Engines		
40 C.F.R. Part 63, Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for		
	Stationary Reciprocating Internal Combustion Engines		

State Only:

None

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	Date of	Permit Determinations or Amendments That
Consent Order Number	Issuance	Affect the Permit (if any)
R13-3150B	June 21, 2018	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

This permit modification incorporates the modified R13-3150B permit which replaces three (3) existing engines with three (3) "like kind" compressor engines. Also included in R3-133150B are the modifications under R13-3150A which increases throughputs for three (3) thermal oxidizers, increases the dehydration capacity for two (2) dehydration units, permits thermal oxidizer TO-4 as a non-emergency unit and installs one (1) new methanol storage tank. The changes associated with R13-3150A also included the removal of Heaters 1 and 2, and tanks T07, T20, T21, T22 and T23.

The primary revisions of this modification include updating the citation of authority with the corresponding R13-3150B permit conditions and the following:

- 1) The "Emission Units" table was updated to reflect the changes as described above. The information in the table was also updated to reflect the "as installed" equipment. Note The manufacture date in the description for engine CE001 is incorrect in the Emission Units Table of permit R13-3150B. The correct date of 4/23/2009 is shown in the Title V permit.
- 2) Updated section 1.2 with permit R13-3150B information.
- 3) Conditions 4.1.2. and 4.1.4. Removed the table titles since the information was redundant.
- 4) Condition 4.1.6. Added the Subpart JJJJ requirements for the replaced engines.
- 5) Condition 4.1.9. The compressor engines do not utilize three-way catalysts/non-selective catalytic reduction. Therefore, the requirements of this condition have been removed and replaced with "Reserved."
- **6)** Conditions 4.1.10. and 4.1.11. The facility has fulfilled these requirements. Therefore, the requirements of these conditions have been removed and replaced with "Reserved."
- 7) Condition 4.1.13. The formaldehyde limits were previously omitted and therefore added in 4.1.13.b.2.
- 8) Condition 7.1.1. Increased throughput limits for RSV-2 and RSV-3 per R13-3150B §10.1.1.
- 9) Condition 7.1.2. Revised the language and waste gas limits per R13-3150B §10.1.2.
- 10) Condition 7.1.3. Revised the language and emission limits per R13-3150B §10.1.3.

- 11) Section 8.0 Title Removed HTR-1 and HTR-2.
- **12**) Conditions 8.1.5. and 8.1.6. These conditions contained requirements for HTR-1 and HTR-2 and therefore have been deleted. All subsequent conditions have been renumbered.
- 13) Condition 8.4.1. Revised to remove HTR-1 and HTR-2 per R13-3150B §11.4.1. Since this is a requirement from R13-3150B, 40CSR§30-5.1.c. has been deleted.
- 14) Section 9.0 "Produced Fluids" has been replaced with "Pipeline Liquid" throughout this section.
- **15**) Condition 9.1.2. These requirements were removed from R13-3150B. Therefore, this condition has been deleted. All subsequent conditions have been renumbered.
- **16**) Condition 9.1.3. (9.1.2. revised permit) Revised per R13-3150B §12.1.2. language.
- **17**) Condition 9.1.4. (9.1.3. revised permit) This condition has been revised per R13-3150B §12.1.3. to permit Thermal Oxidizer TO-4 for non-emergency use.

Non-Applicability Determinations

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

None

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: Not Applicable for minor modifications.

Ending Date: N/A

Point of Contact

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

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Division of Air Quality

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Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.