

Fact Sheet



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

Permit Number: **R30-01300001-2016**
Application Received: **December 21, 2015**
Plant Identification Number: **013-00001**
Permittee: **Dominion Transmission, Inc.**
Facility Name: **Yellow Creek Station**
Mailing Address: **925 White Oaks Blvd, Bridgeport, WV 26330**

Revised: N/A

Physical Location: Big Springs, Calhoun County, West Virginia
UTM Coordinates: 495.80 km Easting • 4314.80 km Northing • Zone 17
Directions: Take Interstate 79 North to the Big Otter Exit. Take Route 16 North through Grantsville. After leaving Grantsville, travel on Rt. 16N for approximately 6.1 miles to Calhoun County Rt. 6 (Klipstine Road). Turn right on Rt. 6 and travel 1 mile; station is to the right of road.

Facility Description

Yellow Creek Compressor Station is a natural gas compressor station that compresses production gas to Hastings Extraction Plant. It is covered by Standard Industrial Classification (SIC) Code 4922 and North American Industry Classification System (NAICS) Code 486210. The station consists of one (1) 1100 HP natural gas fired reciprocating engine, two (2) 1000 HP natural gas fired reciprocating engines, one (1) dehydrator reboiler, one (1) glycol dehydration unit with thermal oxidizer, one (1) 11 HP air compressor, ten (10) storage tanks of various sizes, and two (2) 192.5 HP emergency generators. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2015 Actual Emissions
Carbon Monoxide (CO)	246.15	157.21
Nitrogen Oxides (NO _x)	445.68	298.9
Particulate Matter (PM _{2.5})	2.42	0.03
Particulate Matter (PM ₁₀)	2.42	0.71
Total Particulate Matter (TSP)	3.57	0.71
Sulfur Dioxide (SO ₂)	0.08	0.04
Volatile Organic Compounds (VOC)	184.33	80.14

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2015 Actual Emissions
Acetaldehyde	0.56	0.56
Acrolein	0.50	0.40
Benzene	0.55	0.37
Ethylbenzene	0.21	0.004
Formaldehyde	3.73	3.32
Hexane	0.22	0.109
Toluene	1.76	0.37
Xylene	6.70	0.32

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

Title V Program Applicability Basis

This facility has the potential to emit 246.15 TPY of CO, 445.68 TPY of NO_x, and 184.33 TPY of VOC. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Dominion Transmission, Inc.'s Yellow Creek 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.

This facility has been found to be subject to the following applicable rules:

Federal and State: 45CSR2	Opacity requirements for boilers
45CSR6	Open burning prohibited
45CSR11	Standby plans for emergency episodes
45CSR13	NSR Permitting
45CSR16	New Stationary Sources Performance Standards

WV Code § 22-5-4(a)(14) 45CSR30 45CSR34 40 CFR 60, Subpart JJJJ 40 CFR Part 61 40 CFR 63, Subpart HH 40 CFR 63, Subpart ZZZZ 40 CFR Part 82, Subpart F	The Secretary can request any pertinent information such as annual emission inventory reporting Operating permit requirement Emission Standards for HAPs NSPS for Spark Ignition Internal Combustion Engines Asbestos inspection and removal Oil and Natural Gas Production Facilities NESHAP MACT for Reciprocating Internal Combustion Engines Ozone depleting substances	
State Only:	45CSR4 45CSR17	No objectionable odors Control fugitive particulate matter

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2614B	July 28, 2015	
G60-C034	June 27, 2011	

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 is a third renewal. The following changes have been made since the last permit revision was issued:

- Updated the Equipment Table. During the review for the renewal application, it was noted that the horsepower ratings for EN02 and EN03 should have been 1000 hp, not 1100 hp. The engines have not been replaced. Also revised Tank TK01 from a horizontal tank to a vertical storage tank. Replaced the Kohler 16 hp air compressor (CPR01) with a Gardner Denver 11 hp air compressor (CPR02). Removed Tanks TK02, TK06, and TK07. Added Tanks TK10, TK11, TK12, and TK13. These changes do not require an NSR permit because the changes in emissions are below the 6 pph or 10 tpy threshold.
- Conditions 3.1.9. and 3.1.12., Section 4.0, and others marked as "Reserved" due to modifications, were removed. Sections 5.0., 6.0. and 7.0. were renumbered to 4.0., 5.0., and 6.0.
- Condition 3.1.13. related to 40 CFR part 63, subpart ZZZZ was duplicated in old permit condition 6.1.1 (now 5.1.1), therefore it was removed.

- Condition 3.7.2. was not included in the renewal permit. The permit application did not request a permit shield. However, the non-applicable determinations are listed below in the Non-Applicability section.
- Section 5.0 (formerly Section 6.0) references to the "three 1100 HP reciprocating engines" were replaced with "the 1100 HP reciprocating engine and the two 1000 HP reciprocating engines".
- Condition 5.1.1.b. was added for EN02 and EN03 from 40 CFR 63, subpart A.
- The Table in Condition 5.1.2.a. (formerly Condition 6.1.2.) was revised. Requirements for EN02 and EN03 were updated. CPR01 was removed. CPR02 is subject to 40 CFR 60 Subpart JJJJ and must meet the requirements of 40 CFR 63 subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart JJJJ. Therefore it was not included in this Table.
- EN02 and EN03 have updated requirements from 40 CFR 63 Subpart ZZZZ, therefore the Title V permit was revised to include these changes.
- Section 6.0. (formerly Section 7.0) was changed to include the requirements from 40 CFR 60 Subpart JJJJ, replacing the reference to general permit G60-C034, which is still applicable.

40 CFR 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. Yellow Creek Station has one 1100 HP and two 1000 HP reciprocating engines, each with integral compressors, that are subject to 40 CFR Part 63 Subpart ZZZZ. The facility is an area source of HAPs. These engines were constructed prior to June 12, 2006 and combust pipeline quality natural gas.

The 1100 HP engine (EN01) is an existing spark-ignition (SI) two-stroke lean burn (2SLB) engine. The requirements for EN01 have not changed from the previous Title V permit. The two 1000 HP engines (EN02 and EN03) are existing spark-ignition (SI) four-stroke rich burn (4SRB) engines. The engines have not been replaced, however the requirements from the revised 40 CFR 63 subpart ZZZZ have changed and were updated in the Title V Permit.

40 CFR Part 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The compressor (CPR02) is a new SI four-stroke rich burn (4SRB) air compressor that combusts pipeline quality natural gas and is rated at 11 hp. The engine was constructed in 2011 and is subject to this NSPS. The applicable requirements were included in Section 5.0.

Non-Applicability Determinations

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

40 CFR 60 Subpart JJJJ – The compressor engines (EN01 – EN03) are not subject to this subpart since they were manufactured in 1977, before the applicability date.

40 CFR 60 Subpart OOOO – This subpart does not apply to the facility since the facility is a gathering facility that does not have gas wells, centrifugal compressors, reciprocating compressors, and/or pneumatic controllers constructed, modified, or reconstructed after August 23, 2011. None of the newly installed tanks onsite meet the applicability requirements in 40 CFR § 60.5365(e).

40 CFR 63 Subpart HHH – This subpart does not apply to the facility since the facility is not a transmission or storage station and is not a major source of HAPs.

40 CFR 63 Subpart DDDDD – The reboiler (RBR02) is not subject to this subpart since the facility is not a major source of HAPs.

40 CFR 63 Subpart JJJJJ – The reboiler (RBR02) is not subject to this subpart since it is considered a “process heater,” which is excluded from the definition of “boiler”.

40 CFR 64 – The dehy unit (DEHY02) is not subject to CAM since the unit is subject to NESHAP Subpart HH, which has emission limitations and standards established after 1990 (exemption per § 64.2(b)(1)(i)). In addition, since the R13-2614B permit specifies a “continuous compliance determination method” (e.g. continuously monitoring the flare using a thermocouple to detect the presence of a flame) which was included in the Title V permit, CAM does not apply (exemption per § 64.2(b)(1)(vi)).

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: Thursday, October 13, 2016
Ending Date: Monday, November 14, 2016

Point of Contact

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

Bobbie Scroggie
West Virginia Department of Environmental Protection
Division of Air Quality
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Charleston, WV 25304
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Procedure for Requesting Public Hearing

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

Response to Comments (Statement of Basis)

USEPA commented that Conditions 4.2.2., 4.3.1., and 4.3.2., related to monitoring and testing, are not practically enforceable because there is no required frequency. DAQ responded that Condition 4.2.2. relates to visible emissions from the 0.75 mmBtu/hr natural gas boiler, which is not expected to produce visible emissions. DAQ responded that Conditions 4.3.1. and 4.3.3., related to the dehy and thermal oxidizer, will show compliance through monitoring and recordkeeping. The DAQ has the discretion to ask for testing if there is a problem, but the DAQ has deemed the large margin of compliance to be sufficient to justify not requiring frequent testing. USEPA commented that Condition 4.1.3.c.1., which references requirements from 40 CFR Part 63 Subpart HH, should instead include the MACT language in its entirety. DAQ responded that the facility is exempt from 4.1.3.c.1. unless the limits in 4.1.3.d. are exceeded and including the additional language could lead to confusion as to the method of compliance for the facility.