

Fact Sheet



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

Permit Number: **R30-10900019-2017**
Application Received: **July 5, 2016**
Plant Identification Number: **109-00019**
Permittee: **Dominion Transmission, Inc.**
Facility Name: **Loup Creek Compressor Station**
Mailing Address: **925 White Oaks Blvd; Bridgeport, WV 26330**

Revised: N/A

Physical Location: Kopperston, Wyoming County, West Virginia
UTM Coordinates: 449.31 km Easting • 4176.86 km Northing • Zone 17
Directions: From I-77 at Harper Road, turn onto State Route 3 north for 10.4 miles. Turn onto Route 99 west for 14.3 miles. Turn left on Route 85 and travel 4 miles to Kopperston Grade School. Turn left on private road to Loup Creek Station.

Facility Description

Loup Creek Compressor Station is a natural gas production facility covered by Standard Industrial Classification (SIC) Code 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of four (4) natural gas fired reciprocating compressor engines, one reciprocating emergency generator, one (1) dehydrator reboiler, one (1) dehydration unit with flare, and storage tanks of various sizes.

This renewal also addresses changes requested in the application for R30-10900019-2012 (MM01). This permit modification was to correct the horsepower rating on EN04 from 1085 HP to 1150 HP and revise emission limits as necessary. These changes have already been made in R13-2839C.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2015 Actual Emissions
Carbon Monoxide (CO)	72.60	44.56
Nitrogen Oxides (NO _x)	405.23	237.95
Particulate Matter (PM _{2.5})	3.75	0.02
Particulate Matter (PM ₁₀)	3.75	0.53
Total Particulate Matter (TSP)	5.13	0.53
Sulfur Dioxide (SO ₂)	0.08	0.03
Volatile Organic Compounds (VOC)	94.73	42.71

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2015 Actual Emissions
Acetaldehyde	1.07	0.36
Acrolein	0.95	0.35
Benzene	0.62	0.09
Ethylbenzene	0.99	0.005
Formaldehyde	7.35	1.76
Hexane	0.21	0.04
Toluene	0.78	0.04
Xylene	1.77	0.01
Total HAPs	13.74	2.66

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

Title V Program Applicability Basis

This facility has the potential to emit 405.23 TPY of NO_x. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Dominion Transmission, Inc. 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:

	45CSR2	Opacity Requirements for boilers
	45CSR6	Open burning prohibited.
	45CSR10	Sulfur requirements for fuel burned
	45CSR11	Standby plans for emergency episodes.
	45CSR13	New Source Construction
	45CSR16	New Stationary Sources
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for HAPs
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
	40 C.F.R. 60, Subpart JJJJ	NSPS for SI -RICE
	40 C.F.R. 63, Subpart ZZZZ	Area Source RICE Standards
	40 C.F.R. 63, Subpart HH	Area Source Natural Gas Production
State Only:	45CSR4	No objectionable odors.
	45CSR17	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>)
R13-2839C	9/23/2016	

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

Emission Units Table Changes

The following equipment has been removed or added to the emission units table with this renewal:

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Equipment Removed					
TK01	TK01	Horizontal Aboveground Ethylene Glycol Tank	1950	563 gallons	N/A
TK05	TK05	Vertical Aboveground Pipeline Fluids Tank	2002	4,200 gallons	N/A
TK07	TK07	Engine Oil Tank	2002	1,000 gallons	N/A
TK09	TK09	Used Triethylene Glycol Tank	2002	2,100 gallons	N/A
Equipment Added					
TK11	TK11	Horizontal Aboveground Lube Oil Tank	2003	1,066 gallons	N/A
TK12	TK12	Horizontal Aboveground Triethylene Glycol Tank	2010	500 gallons	N/A
TK13	TK13	Vertical Aboveground Used Triethylene Glycol Tank	2015	1,260 gallons	N/A
TK14	TK14	Vertical Aboveground Pipeline Fluids Tank	2012	4,200 gallons	N/A

The following revisions/corrections were also made to the emission units table with this renewal:

- The horsepower rating for EN04 was changed from 1085 HP to 1150HP.
- The description for TK06 was revised to read “horizontal above ground lube oil tank” instead of “engine oil tank”.
- The installation date for TK08 was revised to read 2003 instead of 2002.

Moving Conditions from Facility Wide Requirements Section to Source-Specific Section

Upon the request of the permittee, conditions 3.1.9, 3.1.10, 3.2.2, and 3.2.3 were moved from the facility-wide requirements to section 5.0 and renumbered as conditions 5.1.14, 5.1.15, 5.2.4, and 5.2.5. These conditions cover only the dehydration unit and flare, which are addressed specifically in section 5.0.

Changes Made Regarding 40 CFR 63, Subpart HH

The following changes were made to this permit to reflect the current language in this subpart:

- Condition 5.1.12 was removed because the compliance date has passed.
- Condition 5.3.5 was revised to reflect the current language in this subpart.
- Condition 5.4.9 was added requiring records of the actual average benzene emissions, as required in 40 C.F.R. §63.774(d)(1).

Changes Made Regarding 40CFR60 Subpart JJJJ Requirements for EG-01

- Conditions 7.4.1.a and 7.6.1.a.3 from the previous permitting action were removed. The emergency generator is a non-certified engine.
- Conditions 7.4.1.b.2, portions of 7.6.1.b, and 7.6.1.c. from the previous permitting action were removed with this renewal. EG-01 is rated greater than 130 HP and less than 500 HP, therefore these requirements do not apply.
- Condition 7.4.2 was revised to reflect the current language from 40CFR60, Subpart JJJJ.
- Conditions 7.5.1 and 7.6.1.d from the previous permitting action were removed. The initial performance testing was completed on February 14, 2012, and there are no ongoing performance testing requirements.

Changes Made in R13-2939C

The following changes were made with this renewal as a result of changes made in R13-2839C:

- The horsepower rating for EN04 was changed from 1085 HP to 1150HP in the emission units table.
- Condition 9.1.5 (condition 10.1.1. of R13-2839C) was revised to reflect the new horsepower rating, and the emissions limits were adjusted accordingly.

Changes Made to Reflect Current Language in 40 CFR 63, Subpart ZZZZ

The following changes were made to Sections 8.0 and 9.0 to reflect the current language in 40 CFR 63, Subpart ZZZZ:

- References to 45CSR34 were added, where appropriate, to the regulatory citations.
- The table in condition 8.1.2 was updated to address periods of startup.
- The regulatory citations for condition 8.1.4 were revised to include Table 6 of 40CFR63, Subpart ZZZZ.
- Portions of condition 8.5.1 were removed. Reporting, as required by Table 7, does not apply to EN01-EN03.
- All references to Table 2b of 40 CFR 63, Subpart ZZZZ were removed from condition 9.1.2. Table 2b contains requirements for a major source of HAP emissions. However, this facility is an area source. Additionally, the requirements from Table 2d of 40 CFR 63, Subpart ZZZZ were updated to reflect the current language. The condition was revised to require use of an oxidation catalyst and minimizing time spent at idle.
- Condition 9.2.2.a from the previous permitting action was removed with this permit renewal. The delated language addressed CEMS, however this facility uses CPMS instead.
- Applicable requirements from Table 5 of 40 CFR 63, Subpart ZZZZ were added to condition 9.3.2.a (previously 9.3.4.a).
- Conditions 9.3.1, 9.3.4.c, 9.5.2.h, and 9.5.3.b.1-2 were removed. These requirements have already been completed and are no longer necessary. The initial performance test was performed on May 21, 2013.
- Condition 9.3.2 was removed. This facility is not subject to Table 3.
- Conditions 9.3.3.f, g, and h were removed. These conditions do not apply to EN04.
- Condition 9.3.4.b was removed. This facility is not subject to Tables 1b and 2b, therefore this section does not apply.
- Applicable requirements from Table 6 of 40 CFR 63, Subpart ZZZZ were added to condition 9.5.1.a.
- Condition 9.5.1.c, which addresses annual compliance demonstrations, was added.
- Condition 9.5.1.d does not apply and was removed.
- Portions of 9.5.1.e were removed that do not apply to EN04.
- Conditions 9.5.2.a.1, 3, 4, and 5 were removed. EN04 is only an existing stationary RICE located at an area source of HAPs.
- Condition 9.5.3.a was revised to list all applicable requirements from Table 7.
- Conditions 9.5.3.b.1,2,6,7,8,9 were removed. Annual compliance reports are not required for EN04.

Non-Applicability Determinations

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

- a. 45 CSR 10 – Compressor engines (EN01 – EN04) have been excluded from the applicability of SO₂ and H₂S limits. WVDAQ determined that 45 CSR 10 is not applicable to compressor engines.
- b. 40 CFR 60 Subpart JJJJ – The compressor engines (EN01 – EN04) are not subject to this subpart since they were manufactured before the applicability date.
- c. 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, tanks, and/or pneumatic controllers constructed, modified, or reconstructed after August 23, 2011 and on or before September 18, 2015. None of the newly installed tanks onsite meet the applicability requirements in 40 CFR §60.5365(e).
- d. 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.
- e. 40 CFR 63 Subpart DDDDD – The reboiler (RBR01) is not subject to this subpart since the facility is not major a source of HAPs.
- f. 40 CFR 63 Subpart JJJJJ – The reboiler (RBR01) is not subject to this subpart since it is considered a “process heater,” which is excluded from the definition of “boiler” in 40 CFR §63.11237.
- g. 40 CFR 64 – The dehy unit (DEHY01) is not subject to CAM since the unit is subject to 40CFR63 Subpart HH, which has provisions for compliance monitoring established after 1990 (exemption per 40 CFR §64.2(b)(1)(i)). In addition, since the R13-2839B permit specified 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 40 CFR §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: Wednesday, November 23, 2016
Ending Date: Friday, December 23, 2016

Point of Contact

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

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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.