Fact Sheet

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

 Permit Number: **R30-01300001-2011**
 Application Received: **February 2, 2011**
 Plant Identification Number: **03-54-013-00001**
 Permittee: **Dominion Transmission, Inc.**
 Facility Name: **Yellow Creek Station**
 Mailing Address: **445 West Main Street, Clarksburg, WV 26301**

---

**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 Route 16 North for approximately 6.1 miles to Calhoun County Route 6 (Klipstine Road). Turn right onto Route 6 and travel 1 mile; station is to the right of road.

---

**Facility Description**

Yellow Creek Compressor Station is a natural gas transmission facility covered by Standard Industrial Classification (SIC) Code 4922 and North American Industry Classification System (NAICS) Code 48612. The station consists of three (3) 1100 HP natural gas fired reciprocating engines, one (1) dehydration reboiler, one (1) dehydration unit with flare, one (1) 16 HP air Compressor and nine (9) storage tanks of various sizes. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day.

The Yellow Creek Station is a production facility that compresses production gas to Hastings Extraction Plant.
Emissions Summary

<table>
<thead>
<tr>
<th>Regulated Pollutants</th>
<th>Potential Emissions</th>
<th>2009 Actual Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>268.15</td>
<td>217.27</td>
</tr>
<tr>
<td>Nitrogen Oxides (NO(_x))</td>
<td>443.66</td>
<td>412.38</td>
</tr>
<tr>
<td>Particulate Matter (PM(_{2.5}))</td>
<td>0.02</td>
<td>0.017</td>
</tr>
<tr>
<td>Particulate Matter (PM(_{10}))</td>
<td>1.17</td>
<td>0.97</td>
</tr>
<tr>
<td>Total Particulate Matter (TSP)</td>
<td>1.17</td>
<td>0.97</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO(_2))</td>
<td>0.11</td>
<td>0.06</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOC) (^1)</td>
<td>116.50</td>
<td>109.23</td>
</tr>
</tbody>
</table>

\(^1\) PM\(_{10}\) is a component of TSP.

<table>
<thead>
<tr>
<th>Hazardous Air Pollutants</th>
<th>Potential Emissions</th>
<th>2009 Actual Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total HAPs (^2)</td>
<td>8.9</td>
<td>7.68</td>
</tr>
</tbody>
</table>

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

\(^2\) The highest HAP PTE is Formaldehyde at 5.31 TPY.

Title V Program Applicability Basis

This facility has the potential to emit 268.15 tons per year of Carbon Monoxide (CO), 443.66 tons per year of NO\(_x\) and 116.50 tons per year of VOC. 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:

<table>
<thead>
<tr>
<th>Federal and State:</th>
<th>45CSR2</th>
<th>45CSR6</th>
<th>45CSR10</th>
<th>45CSR11</th>
<th>45CSR13</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open burning prohibited.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Prevent and Control Air Pollution from the Emissions of Sulfur Dioxides</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standby plans for emergency episodes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits, and Procedures for Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 Hazardous Air Pollutants
40 C.F.R. Part 61 Asbestos inspection and removal
40 C.F.R. Part 82, Subpart F Ozone depleting substances

State Only:
45CSR4 No objectionable odors.
45CSR17 Control fugitive particulate matter
45CSR42 Greenhouse Gas Emissions Inventory Program

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

<table>
<thead>
<tr>
<th>Permit or Consent Order Number</th>
<th>Date of Issuance</th>
<th>Permit Determinations or Amendments That Affect the Permit (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R13-2614A</td>
<td>June 27, 2006</td>
<td></td>
</tr>
</tbody>
</table>

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 B," which may be downloaded from DAQ's website.

Determinations and Justifications

Since R30-01300001-2006 was issued, there have been no changes to the Dominion Transmission, Inc. Yellow Creek Station Title V Permit.

The following updates were made to the renewal permit:

1. The Emission Unit Table 1.0 was revised in accordance with Attachment D of Dominion Transmission, Inc. Yellow Creek Station Title V Renewal Application. The only change between the 2006 renewal and the 2011 renewal is that a 400 gallon horizontal tank that was above ground containing Tri-Ethylene Glycol (TK10) was removed. This change did not influence any applicability to any rule and/or regulation.
2. Added Section 1.2, Active R13, R14, and R19 Permits and Table.

3. The regulatory language for Sections 3.1.1 and 3.1.2, 45CSR§§6-3.1 and 3.2, was updated.

4. 45CSR34 incorporates and is now cited with 40 C.F.R. Part 61 because 45CSR15 was repealed. The citation for 3.1.3 has been revised accordingly.

5. Title V boiler plate was revised to incorporate the greenhouse gas language, 45CSR42, in Sections 3.1.9 and 3.5.10.

6. Section 3.1.14 was added and states that the Secretary has the authority to suspend or revoke an approved R13 permit if the construction and operation are not in accordance with the plans and specifications.

7. The boilerplate language for Section 3.3.1 was revised with the addition of Section 3.3.1.d and the citation was also revised to expand the authority of the West Virginia state code.

8. Replaced “N/A” in Section 3.7.2 of the second renewal Title V permit with the “Non-Applicability Determinations” table that is in the Fact Sheet.

9. Section 5.1.12 was added to address Yellow Creek’s potential applicability to 40 C.F.R. Part 63 Subpart HH. Based on the PTE data submitted by Dominion, this facility is exempt from 40 C.F.R. Part 63 Subpart HH, as stated in 40 C.F.R. § 63.764 (e) (1) (ii), since it emits less than 1 tpy of benzene.

However, if Yellow Creek ever exceeds 1 tpy of benzene, they would be subject to 40 C.F.R. § 63.764 (d) (2). The facility would be required to calculate the optimum glycol circulation rate and operate the dehydration unit such that the actual glycol circulation rate does not exceed the optimum glycol circulation rate. Additionally, a record of determination must be maintained.

The estimated benzene PTE for Yellow Creek Station is 0.49 TPY per the 2011 renewal application. The 2009 actual benzene emissions from the “2010 Certified Emissions Statement” are 0.45 TPY.

10. 40 C.F.R. Part 63 Subpart ZZZZ area source requirements were incorporated as Section 6.0.

11. Dominion Transmission, Inc. has not modified the Yellow Creek Station that would trigger a PSD permit and require GHG permitting.


The Dominion Transmission, Inc. Yellow Creek Station has three (3) 1100 HP reciprocating engines, each with integral compressors, and a 16 HP air compressor that are subject as an area source of 40 C.F.R. Part 63 Subpart ZZZZ. The facility is a minor source of HAPs. These engines were constructed prior to June 12, 2006. The facility shall comply with all applicable requirements of 40 C.F.R. Part 63 Subpart ZZZZ by October 19, 2013 per 40 C.F.R. § 63.6595 (see Section 3.1.13.).

Although non-major area source MACT 40 C.F.R. Part 63 Subpart ZZZZ is excluded from state delegation in 45CSR34, its requirements are considered enforceable under 45CSR30 because of the definition in 45CSR§30-2.6.d, which includes any requirement subject to §112 of the CAA. This, coupled with 45CSR§30-5.2., allows enforcement (by DAQ) of these non-delegated requirements.

One of the three (3) 1100 HP engines (EN01) is an existing spark-ignition (SI) two-stroke lean burn (2SLB) Cooper GMV-10TF Reciprocating Engine/Integral Compressor that combusts pipeline quality natural gas. The other two 1100 HP engines (EN02 and EN03) are existing spark-ignition (SI) four-stroke rich burn (4SRB) Ingersoll Rand 103KVG-HL Reciprocating Engines/Integral Compressors that combust pipeline quality natural gas. The compressor (CPR01) is an existing SI four-stroke rich burn (4SRB) Kohler K341S
Air Compressor that combusts pipeline quality natural gas and is rated at 16 hp. As stated below, the engines and compressor meet the definition for stationary reciprocating internal combustion engines (RICE) according to 40 C.F.R. § 63.6585 (a):

A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differs from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

The Yellow Creek Station engines are in the category of greater than 500 HP as established by the RICE regulation.

Engine (EN01) is subject to the maintenance requirements for a 2SLB (every 4,320 hours change oil/filter, inspect spark plugs, and inspect hoses/belts), Table 2d, Item 6. Engines (EN02 and EN03) are subject to the maintenance requirements for a 4SRB (limit concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd at 15 percent O₂; or reduce formaldehyde emissions by 76 percent or more, Table 2d, Item 10. The air compressor (CPR01) fits into the 4SRB less than 500 HP category (change oil and filter every 1,440 hours of operation or annually, whichever comes first; inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary), Table 2d, Item 9.

Following, are the applicable RICE MACT requirements according to the RICE Summary Table of requirements provided by the EPA ([http://www.epa.gov/ttn/atw/rice/ricepg.html](http://www.epa.gov/ttn/atw/rice/ricepg.html)). EN01, EN02, EN03, and CPR01 have compliance date of October 19, 2013.

<table>
<thead>
<tr>
<th>Emission Unit ID</th>
<th>Emission Limitations</th>
<th>Operating Limitations</th>
<th>Performance Testing</th>
<th>Monitoring Requirements</th>
<th>Initial Compliance</th>
<th>Continuous Compliance</th>
<th>Notification Requirements</th>
<th>Record-keeping Requirements</th>
<th>Reporting Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN01</td>
<td>§ 63.6603</td>
<td>None</td>
<td>None</td>
<td>§ 63.6625 (e), (b), (j)</td>
<td>None</td>
<td>§ 63.6605</td>
<td>None</td>
<td>§ 63.6655 (a), (b), (d), (e)</td>
<td>None</td>
</tr>
<tr>
<td>EN02</td>
<td>§ 63.6603</td>
<td>§ 63.6603</td>
<td>Table 2d</td>
<td>§ 63.6625 (a), (b), (h), (k)</td>
<td>§ 63.6630</td>
<td>§ 63.6605</td>
<td>§ 63.6645 (The Notice shall be issued on or before February 16, 2011.)</td>
<td>§ 63.6655 (a), (b), (d)</td>
<td>§ 63.6650 (a) – (f)</td>
</tr>
<tr>
<td>EN03</td>
<td>§ 63.6603</td>
<td>§ 63.6615</td>
<td>Table 2d</td>
<td>§ 63.6625 (a), (b), (h), (k)</td>
<td>§ 63.6630</td>
<td>§ 63.6605</td>
<td>§ 63.6645 (The Notice shall be issued on or before February 16, 2011.)</td>
<td>§ 63.6655 (a), (b), (d)</td>
<td>§ 63.6650 (a) – (f)</td>
</tr>
<tr>
<td>CPR01</td>
<td>§ 63.6603</td>
<td>None</td>
<td>None</td>
<td>§ 63.6625 (e), (b), (j)</td>
<td>None</td>
<td>§ 63.6605</td>
<td>None</td>
<td>§ 63.6655 (a), (b), (d), (e)</td>
<td>None</td>
</tr>
<tr>
<td>4SRB</td>
<td>Table 2d</td>
<td>Table 2d</td>
<td>Table 3</td>
<td>Table 4</td>
<td>Table 5</td>
<td>Table 5</td>
<td>Table 5</td>
<td>Table 5</td>
<td>Table 5</td>
</tr>
</tbody>
</table>

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:
<table>
<thead>
<tr>
<th>40 C.F.R. Part 60 Subpart III</th>
<th>Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The three (3) 1100 HP reciprocating engines with integral compressors were manufactured before July 11, 2005 and they are not fired by diesel. Thus, these engines are not subject to 40 C.F.R. Part 60 Subpart III.</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 C.F.R. Part 60 Subpart JJJJJ</td>
<td>Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The three (3) 1100 HP reciprocating engines with integral compressors were manufactured before July 12, 2006 and these units combust natural gas. Thus, these engines are not subject to 40 C.F.R. Part 60 Subpart JJJJJ.</td>
</tr>
<tr>
<td>40 C.F.R. Part 63 Subpart HHH</td>
<td>National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. The Yellow Creek Station is not subject to Subpart HHH since the station compress production gas Hastings Extraction Plant. The Yellow Creek Station is a minor (area) source of HAPs.</td>
</tr>
<tr>
<td>40 C.F.R. Part 64</td>
<td>This is the second permit renewal for this facility. The facility was found not to be subject to CAM at the time of the first renewal. Therefore, a CAM determination is not required.</td>
</tr>
</tbody>
</table>

**Request for Variances or Alternatives**

None

**Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

**Comment Period**

<table>
<thead>
<tr>
<th>Beginning Date:</th>
<th>April 21, 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ending Date:</td>
<td>May 23, 2011</td>
</tr>
</tbody>
</table>

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

Wayne Green  
Title V Permit Writer  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57th Street SE  
Charleston, WV 25304

**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.
Point of Contact

Wayne Green  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57th Street SE  
Charleston, WV 25304  
Phone: 304/926-0499 ext. 1258 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

None