

# 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 March 29, 2007.

Permit Number: **R30-04100013-2007(MM02)**  
Application Received: **November 12, 2010**  
Plant Identification Number: **03-54-04100013**  
Permittee: **Dominion Transmission, Inc**  
Facility Name: **Lightburn Compressor Station**  
Mailing Address: **445 West Main Street**  
**Clarksburg, WV 26301**

Permit Action Number: *MM02*      Revised: *July 11, 2011*

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Physical Location:	Jane Lew, Lewis County, West Virginia
UTM Coordinates:	547.54 km Easting • 4331.11 km Northing • Zone 17
Directions:	From Charleston take I-79N to Jane Lew. Take Exit 105 (Jane Lew Exit) and make a left on County Road 7 (Berkin-Jane Lew Road). Stay on CR-7 until it intersects Route 19 (Main Avenue). Make a right on Route 19 and make the immediate left on Broad Run Road. Stay on Broad Run Road until it intersects County Road 1 (Old Mill Road/Fork River Road/Jacksons Mill Road) and make a right. Stay on CR 1 for about 500 yards and Lightburn Station is on the right.

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### Facility Description

This facility is a natural gas extraction plant (LEP). LEP is located adjacent to the existing Lightburn Compressor Station (LCS). The LEP and LCS are located on contiguous property and will be under control of the same person. However, the plants do not belong to the same industrial grouping (SIC). The LCS operates under SIC Code 4922 (Pipeline Transmission of Natural Gas), and the LEP operates under SIC Code 1321 (Natural Gas Liquid Extraction).

The natural gas capacity of the LEP is 44 MMSCFD, and the plant is estimated to produce 1,916 barrels/day of natural gas liquids. The LEP Plant will receive natural gas from the existing Kennedy Compressor Station and Wymer Junction. The proposed minor modification is to include:

1. **An auxiliary generator set to be used for backup power.** The engine will be Generac Power Systems, Inc, Model QT-150 rated at 254 hp. The engine will be equipped with a three-way catalyst to reduce emissions of hydrocarbon (HC), NO<sub>x</sub> and CO. Air-to-fuel ratio controllers will be installed to ensure an optimum air/fuel mixture ratio. The generator set will be considered an emergency unit, and operation will be limited to 500 hours/year.
2. Include construction permit R13-2823A which addresses addition of above generator.

### Emissions Summary

The following table outlines the changes in potential emissions (tons per year) based upon prior permit modifications, as well as this modification (i.e., MM02). According to Attachment S of the application, the facility's potential emissions will change by the quantities given in the "ΔMM02" column. All other data was obtained from the Fact Sheets for each permitting action.

Pollutant	PTE prior to MM02 (TPY)	ΔMM02 (TPY)	PTE Proposed MM02 (TPY)
PM <sub>2.5</sub>	≥ 2.61	+0.01	≥ 2.62
PM <sub>10</sub>	12.27	+0.01	12.28
TSP (PM)	13.57	+0.01	13.58
SO <sub>2</sub>	1.05	+0.01	1.06
CO	1,084.08	+0.22	1,084.30
NO <sub>x</sub>	2,495.74	+0.01	2,495.75
VOC (excluding fugitives)	534.16	+0.02	534.18
Formaldehyde	51.47	+0.01	51.48
Acrolein	1.20	+0.001	1.20
Acetaldehyde	8.22	+0.001	8.22
Total HAPs	69.94	+0.02	69.96

<sup>1</sup>PM is filterable + condensable and all PM is assumed to be PM<sub>2.5</sub>

### Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 1,084.30 tons per year of Carbon Monoxide; 2,495.75 tons per year of Nitrogen Oxides; 534.18 tons per year of Volatile Organic Compounds; 51.48 tons per year of Formaldehyde; and 69.96 tons per year of aggregate Hazardous Air Pollutants. 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, Dominion Transmission's Lightburn 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:	45CSR13 45CSR16 45CSR30 40 C.F.R. 60 Subpart JJJJ 40 CFR Part 63, Subpart ZZZZ	Standards of Performance for New Stationary Sources Operating permit requirement. NSPS for Stationary Spark Ignition IC Engines RICE MACT
State Only:	N/A	
Federal Only:	N/A	

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**

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
R13-2823A	May 2, 2011	N/A
R14-0009E	January 5, 2009	N/A

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**

1. In Section 2.1.4 "monthly" has been added to better define "rolling yearly total".
2. Paragraph d is added to section 3.3.1 for submittal of testing report.
3. Sections 7.1.33, 7.1.34, 7.1.35, 7.4.9 and 7.4.10 are added to incorporate new sections in Rule 13 modification R13-2823A. Section 7.1.33 has emission limits from the emergency generator. The emission limits are the maximum potential emissions from the engine based on operating maximum 500 hours per year. Therefore, keeping records of hours of operation will demonstrate compliance with the emission limits in 7.1.33.

4. 40 CFR 63 Subpart ZZZZ - This rule is applicable to facilities that own or operate stationary reciprocating internal combustion engines (RICE) at major and area sources of HAP. A major source of HAP emissions is a plant site that has a potential to emit of 10 tons/yr single HAP, or 25 tons/yr aggregate HAP, except that for oil and gas production facilities, a major source of HAP emission is determined at each surface site, per 40 C.F.R §63.6585(b). A surface site is defined in 40 C.F.R §63.6675 as *any combination of one or more graded pad sites, gravel pad sites, foundation, platforms, or the immediate physical location upon which equipment is physically affixed.*

The LCS and LEP are separate surface sites. Even though emissions from the LCS and LEP are aggregated together for Title V applicability because they are in close proximity to each other and under common control (in accordance with EPA's January 12, 2007 memorandum entitled *Source Determination for Oil and Gas Industries*), the emissions are not to be aggregated for major source determination under subpart ZZZZ. LEP is considered a minor HAP source for subpart ZZZZ, while the LCS is considered a major HAP source.

The proposed engine (012-01) at the LEP will be considered a new engine at an area source since construction will commence after June 12, 2006. Per 40 C.F.R §63.6590(c) (Section 7.1.39 of the permit), the engine meet the requirements of subpart ZZZZ by meeting the requirements of 40 CFR Part 60, Subpart JJJJ. No further requirements apply under Subpart ZZZZ.

5. 40 CFR 60 Subpart JJJJ – This rule is applicable because the proposed emergency engine will commence construction after June 12, 2006, and will be manufactured after January 1, 2009 [for engines < 500 horsepower (hp)], per 40 C.F.R. § 63.4230(a)(4)(iii). Below is a summary of Subpart JJJJ as applicable to the engine associated with the proposed auxiliary generator set:

a) Section 7.1.36 of the permit - Emissions Limitations for the engine, per 40 C.F.R. § 60.4233(e).

Note: Though no monitoring is required for this engine as stated in section b below, the following table shows that meeting 45CSR13 limits will show compliance with JJJJ limits:

Pollutant	JJJJ limit in g/hp-hr	horsepower	JJJJ limit in lbs/hr	R13-2823A limits in lbs/hr
NOx	2.0	254	1.12	0.02
CO	4.0	254	2.24	0.85
VOC	1.0	254	0.56	0.07

b) Monitoring requirement – None. Per 40 C.F.R. § 60.4237(b) for engines that are ≥ 130 hp and < 500 hp that were built on or after January 1, 2011, a non-resettable hour meter must be installed and operated to monitor and record the hours of operation of the engine. The engine was built before January 1, 2011, hence this section does not reply.

c) Testing Requirements – None. Permittee will purchase a certified engine in accordance with this rule, per 40 C.F.R. § 60.4243(b)(1) (Section 7.1.37 of the permit). However, records of maintenance are required by 40 C.F.R. § 60.4243(a)(1).

d) Sections 7.1.35, 7.1.37 and 7.1.38 of the permit – Includes the applicable sections of compliance requirements per 40 C.F.R. § 60.4243.

e) Section 7.4.10 of the permit – Recordkeeping requirements per 40 C.F.R. § 60.4245(a)(2). R13-2823A requirement 13.3.2 which referred to recordkeeping requirements per 40 C.F.R. § 60.4245(a)(2) is incorporated in this section.

f) Reporting Requirements – None. Per 40 C.F.R. § 60.4245(c), only engines ≥ 500 hp that have not been certified to meet the emission standards in the rule are required to submit an initial notification. The proposed engine is <500 hp and is certified by the manufacturer.

### Non-Applicability Determinations

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

There are no Greenhouse Gas Clean Air Act requirements for this facility because this minor modification has not triggered a PSD permit.

### **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  
Ending Date: N/A

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

U.K.Bachhawat  
Title V Permit Writer  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> 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**

U.K.Bachhawat  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: 304/926-0499 ext. 1256 • Fax: 304/926-0478

### **Response to Comments (Statement of Basis)**

Not applicable.