



west virginia department of environmental protection

Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone (304) 926-0475 • FAX: (304) 926-0479

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.: R13-2909
Plant ID No.: 017-00033
Applicant: Dominion Transmission, Inc.
Facility Name: New Oxford Station
Location: Oxford, Doddridge County
SIC Code: 4922
Application Type: Construction
Received Date: December 12, 2011
Engineer Assigned: Roy F. Kees, P.E.
Fee Amount: \$2000.00
Date Received: January 3, 2012
Complete Date: January 3, 2012
Due Date: April 3, 2012
Applicant Ad Date: December 13, 2011
Newspaper: *The Herald Record*
UTM's: Easting: 513.336 km Northing: 4342.151 km Zone: 17
Description: Applicant proposes to install a natural gas-fired emergency generator rated at 50.8 horsepower.

DESCRIPTION OF PROCESS

Dominion will utilize a Baldor PSI IGLC35-2G emergency generator to provide backup electrical power in the event of utility electric power failure. The emergency generator utilizes an EPA certified, natural gas-fired engine with a rated capacity of 50.8 horsepower.

SITE INSPECTION

A site inspection determined that a residence was located within the 300 foot boundary making the source ineligible for the G60 General Permit. Therefore Dominion resubmitted the application as a construction under 45CSR13.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

The hourly emission rates were calculated using manufacturer data for the particular engine being used. This engine is EPA certified and meets the allowable limits of Subpart JJJJ.

Table #1 - Engine Emissions		
Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)*
NO _x	0.89	0.22
CO	34.33	8.58
VOC	0.89	0.22

* - Annual Emission Rate is based on operating 500 hours at max load.

REGULATORY APPLICABILITY

45CSR13 - Permits for Construction, Modification, Relocation and Operation of Stationary sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation

Dominion is subject to 45CSR§13-5.1., which states “no person shall cause, suffer, allow permit the construction, modification, or location of any stationary source to be commenced without notifying the Secretary of such intent and obtaining a permit to construct, modify, or relocate the stationary source as required in this rule or any stationary as required in this rule or any other applicable rule promulgated by the Secretary.” This source is a stationary source because it is subject to a substantive rule (Subpart JJJJ) as per 45CSR§13-2.24.a. Dominion has complied with the public review procedures in 45CSR§13-8.3. by publishing a legal ad in *The Herald Record* on December 13, 2011.

45CSR16 Standards of Performance for New Stationary Sources
40 CFR 60 Subpart JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

According to 40CFR§60.4230(a), Dominion's engine is a certified engine subject to Subpart JJJJ because is was built after January 1, 2009 and is an emergency engine with a maximum engine power greater than 25 HP. Since it is certified, no testing will be required.

This rule establishes a program to collect fees for certificates to operate and for permits to construct, modify or relocate sources of air pollution. Funds collected from these fees will be used to supplement the Director's budget for the purpose of maintaining an effective air quality management program. The facility will demonstrate compliance with this rule by obtaining a Certificate to Operate (CTO) and paying annual fees in order to maintain a current CTO.

AIR QUALITY IMPACT ANALYSIS

This writer deemed that an air dispersion modeling study or analysis was not necessary, because the source is a minor source not subject to 45CSR14.

MONITORING OF OPERATIONS

Dominion proposes to monitor the fuel usage and hours of operation of this engine. The writer believes that monitoring these parameters is more than sufficient for this type of emission unit.

RECOMMENDATION TO DIRECTOR

The information provided in the permit application indicates that Dominion's proposed emergency generator meets all the requirements of the applicable rules when operated in accordance with the permit application. Therefore, this writer recommends granting Dominion Transmission, Inc. a Rule 13 Modification for their proposed emergency generator.

Roy F. Kees, P.E.
Engineer - NSR Permitting

Date