



west virginia department of environmental protection

Division of Air Quality
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Earl Ray Tomblin, Governor
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**GENERAL PERMIT REGISTRATION APPLICATION
ENGINEERING EVALUATION / FACT SHEET**

BACKGROUND INFORMATION

Registration No.: G60-C082
Plant ID No.: 079-00188
Applicant: Petroleum Products, Inc.
Facility Name: Nitro
Location: Nitro, Putnam County
SIC Code: 5172
Application Type: Construction
Received Date: October 28, 2015
Engineer Assigned: William T. Rothwell II, P.E.
Fee Amount: \$500.00
Date Received: October 30, 2015
Complete Date: December 14, 2015 (Incomplete: November 27, 2015)
Applicant Ad Date: December 4, 2015
Newspaper: *The Charleston Gazette*
UTM's: Easting: 172.544 km Northing: 5200.589 km Zone: 17
Description: Application for the construction and operation one (1) diesel-fired emergency generator to be used to provide electricity throughout the facility in the event of a power failure.

TYPE OF PROCESS

The following process description was taken from Permit Application G60-C082:

Petroleum Products, Inc. will utilize one (1) Caterpillar CAT 3208 DIT- 175 kW generator set powered by one (1) 263 horsepower diesel fired Caterpillar engine that was manufactured on February 14, 1994. The generator will be housed in an enclosure and have a 500 gallon sub-base fuel tank module. The emergency generator will be used to provide electricity throughout the facility in the event of a power failure.

SITE INSPECTION

A site inspection was deemed unnecessary by the writer at this time due to the remoteness of the location verified by Google Earth. However, this site will be added to the list for regular inspections.

Take I-64 West to Exit 45. Turn left onto WV 25 and go approx. 2 miles. Turn right onto W 19th Street/Republic Way. Go approx. 0.25 miles and turn left into facility at 200 Viscose Road.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Maximum controlled emissions from the Petroleum Product's emergency generator is summarized below. G60-C limits the facility to 500 hours per year of operation.

Emission	Pollutant	Maximum Hourly	Maximum Annual
EG-1 Caterpillar 3208 DIT	Nitrogen Oxides	1.39	0.35
	Carbon Monoxide	0.37	0.09
	Volatile Organic Compounds	0.68	0.17
	Sulfur Dioxide	0.57	0.14
	Particulate Matter-10	0.53	0.13
	Formaldehyde	<0.01	<0.01

Because of the low emission levels, the VOC, Sulfur Dioxides, Particulate Matter, and Formaldehyde emissions will not be written into the permit.

GENERAL PERMIT ELIGIBILITY

The proposed construction and operation of this facility meets the eligibility (Section 1.3), and limitations and standards (Section 5.1) as specified in General Permit G60-C. Petroleum Products, Inc. is not subject to 40CFR60 Subpart III, due to the year of manufacture of the engine (1994) being prior to April 1, 2006.

In consideration of requirements for compliance under the reciprocating internal combustion engines (RICE) National Emissions Standards for Hazardous Air Pollutants, 40 CFR Part 63 Subpart ZZZZ: the RICE NESHAP Summary of Requirements for existing emergency engines greater than 500 hp and less than or equal to 500 hp located at an area source of HAP, constructed before June 12, 2006, the requirements are as follows:

- a. Change oil and filter every 500 hours of operation or annually, whichever comes first;
- b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and

- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

The proposed construction and operation of this facility meets the limitations and standards (Section 6.1) as specified in the General Permit G60-C. Petroleum liquid storage tank volume shall not exceed 39,889 gallons capacity and maximum true vapor pressure shall not exceed 2.17 psia for petroleum liquid storage tanks greater than 19,812 gallon capacity. The tank volume provided for the tank proposed within this application is 500 gallons.

RECOMMENDATION TO DIRECTOR

Petroleum Products Inc. request to construct and operate an emergency generator at the Nitro, Putnam County, WV site meets the requirements of General Permit G60-C and all applicable rules and therefore should be granted a General Permit Registration to construct and operate the said facility.

William T. Rothwell II

William T. Rothwell II, P.E.

Engineer

6/13/2016

Date