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west virginia department of environmental protection

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Earl Ray Tomblin, Governor  
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## ENGINEERING EVALUATION/FACT SHEET

### B BACKGROUND INFORMATION

Application No.:	G65-C553
Plant ID No.:	045-00147
Applicant:	West Virginia Army National Guard
Facility Name:	Logan-Mingo Readiness Center
Location:	Holden
NAICS Code:	928110
Application Type:	Construction
Received Date:	July 15, 2015
Engineer Assigned:	Edward S. Andrews, P.E.
Fee Amount:	\$250.00
Fee Deposit Date:	July 27, 2015
Complete Date:	July 27, 2015
UTM's:	Easting: 402.09 km      Northing: 4,180.02 km      Zone: 17
Description:	The application is for the installation of an emergency generator.

### DESCRIPTION OF CHANGE

A 1000 kW generator set with a Caterpillar C32, diesel engine, will be installed to provide stand-by electric power for the readiness center in the event there is a loss of electricity from the local utility provider. This proposed engine for the generator set is a 2015 Model Year Engine that has been certified by the engine manufacturer and approved by U.S. EPA to be a certified compliant engine under 40 CFR Part 60. This particular engine has been issued Engine Family No. FCPXL32.0NZS-006 by the U.S. EPA's Office of Transportation and Air Quality on July 1, 2014.

### SITE INSPECTION

A site inspection was deemed unnecessary by the writer at this time. Once this registration is processed, the facility will be placed on the regular inspection list of sources.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Emissions from the Caterpillar 32 generator set are indicated in the following table.

Pollutant	Source – EG-1	
	lb/hr	tpy
Oxides of Nitrogen (NO <sub>x</sub> )	16.01	4.00
Carbon Monoxide (CO)	0.42	0.11
Particulate Matter (PM)/ PM less than 10 microns (PM <sub>10</sub> )/ PM less than 2.5 microns (PM <sub>2.5</sub> )	0.06	0.02
Sulfur Dioxide (SO <sub>2</sub> )	0.50	0.13
Volatile Organic Compounds (VOCs)	0.03	0.01
Carbon Dioxide Equivalence (CO <sub>2e</sub> )	1602.85	400.71

REGULATORY APPLICABILITY

The proposed construction and operation of this generator set meets the eligibility requirements required in Section 2.3.1 and the storage tank limitation required in Section 2.1.4.b. as specified in General Permit G65-C.

Subpart IIII (Standard of Performance for Stationary Compression Ignition Internal Combustion Engines) applies to stationary spark ignition engines manufactured after July 1, 2007. The engine for this generator set was manufactured in January 2015, which is after the applicability date of Subpart IIII. Therefore, the engine for this generator set is subject to Subpart IIII to Part 60.

To comply with this Subpart IIII, the applicant has elected to purchase certified engine as allowed under 40 CFR §60.4243(b)(1) and operate such engines according to the manufacturer’s emission-related written instructions as required in 40 CFR §60.4243(a)(1). The model of engine proposed in this application is certified for the 2015 model year under Engine Family Number FCPXL32.0NZS-006 that was issued by U.S. EPA.

The Logan-Mingo Readiness Center is classified as an area source of hazardous air pollutants. 40 CFR §63.6590(c) notes that engines that must meet the requirements of 40 CFR 60, Subpart IIII that no further requirements of 40 Subpart 63, Subpart ZZZZ apply if the engine is located at a area source of hazardous air pollutant. It is understood that the proposed engine is meeting the requirements of the RICE MACT by complying with 40 CFR 60, Subpart IIII.

Engineering Evaluation of G65-C539  
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RECOMMENDATION TO DIRECTOR

The request of West Virginia Army National Guard to operate an emergency generator in Holden, Logan County, WV site meets the requirements of General Permit G65-C and all applicable rules. It is the recommendation of the writer to grant a General Permit Registration to construct and operated the said facility.



Edward S. Andrews, P.E.  
Engineer

September 3, 2015  
Date

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