



west virginia department of environmental protection

Division of Air Quality
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Earl Ray Tomblin, Governor
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MEMORANDUM

To: Beverly McKeone
From: William T. Rothwell II
Date: August 27, 2015
Subject: Huttonsville PSD – Water Treatment Plant – Randolph County, WV
ID #: 083-00136
APP #: PD15-074

BACKGROUND INFORMATION:

Huttonsville PSD installed a 750 KW – Caterpillar CAT C27ATAAC Diesel Engine Generator set utilizing a 1005 HP Caterpillar engine at the above subject facility. The Certified EPA Tier 2 compliant diesel was manufactured in 2014.

The engine is a new source (constructed on or after June 12, 2006), located at an area source of HAPs, and is therefore subject to 40CFR63, Subpart ZZZZ (NESHAP). Due to the year of construction of the engine, it is subject to a substantive requirement of that Federal Rule in which it must comply with 40CFR60 Subpart IIII (NSPS) if applicable.

Since the certified engine is >500 HP and was manufactured after April 1, 2006, although subject to IIII, it is not subject to a substantive requirement in 40CFR60 Subpart IIII. The subject engine is Tier 2 compliant and complies with USEPA regulations under 40CFR89 Tier 2 emissions limits when tested per ISO 8178 D2.

The applicant used 450 HP in the PDF and the supplied emissions were incorrect. The correct potential emissions for the diesel generator are shown below:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
NO _x	8.53	2.13
CO	1.99	0.50
VOC	0.31	0.08
SO ₂	0.01	0.00
PM ₁₀	0.15	0.04

RECOMMENDATION:

The emission rates are above the emission limits of six (6) lb/hr and ten (10) TPY or more, or more than 144 pounds per calendar day; 2 lb/hr, or 5 TPY of HAPs set forth set forth in 45CSR13 - 2.17.a&b. Therefore, a permit is required by this Division for the above emergency generator.



William T. Rothwell II, P.E.
Engineer

8/27/2015

Date