




west virginia department of environmental protection

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MEMORANDUM

To: Beverly McKeone, P.E. – New Source Review Program Manager

From: Ed Andrews, Engineer 

Date: June 17, 2015

Subject: Class I Administrative Update of R13-2659 (R13-2659A) for The Adjutant General's Department – Charleston Armory (039-00540)

On June 2, 2015, the DAQ received a request from The Adjutant General's Department (AG) to update Permit R13-2659. The emergency engines permitted under Permit R13-2659 will participate in the emergency demand response program. The request is to update the applicable requirements into the permit.

Permit R13-2659 limits the generator sets operating schedule to 7,500 hours per year and sulfur content of the fuel to 0.5 % by weight. The current status of the engines has them exempt from the RICE MACT (Subpart ZZZZ).

NESHAP

The Charleston Armory is classified as an area source of HAPs. The following will discuss the key applicable parts of the engine for the generator set with its corresponding subpart.

Subpart ZZZZ

The internal combustion engine for each emergency generator set is classified as an affected source under the NESHAP for Stationary Reciprocating Internal Combustion Engines (Subpart ZZZZ). The proposed engines will have a power output rating of 434 and 605 bhp. An emergency demand response is determined and declared by the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3 or other authorized entity as determined by the Reliability Coordinator.

AG has elected to enter into an agreement to operate this engine as part of the PJM Emergency Load Response Program, which meets the definition of Emergency Demand Response per the subpart. An emergency demand response is determined and declared by the Reliability Coordinator under the North American Electric Reliability Corporation (NERC)

Reliability Standard EOP-002-3 or other authorized entity as determined by the Reliability Coordinator, which would be PJM. Thus, the engine is subject to this subpart and the following are the applicable requirements for a limited use engine with an obligation to operate for more than 15 hours per year for emergency demand response:

- Operate and maintain the engine per manufacturer's instructions or develop and implement a maintenance plan.
- Limit non-emergency operation to 100 hours per calendar year, which included emergency demand response.
- Be fueled only with ultra-low sulfur diesel starting in 2015.
- Oil & oil filter changes every 500 hours of operation or at least annually
- Inspect & replace if necessary air filter, belts, and hoses every 1,000 hours of operation or at least annually.
- Must be equipped with a non-resettable hour meter.
- Report the demand response hours starting in 2015.

The proposed change in applicability status for these engines as affected sources under the RICE MACT will not increase emissions or trigger any other requirement than what have already been noted. The existing emission limits in conditions in Permit R13-2659 were incorporated into the permit. The fuel usage and operating schedule limits were incorporated as means to demonstrate compliance with the hourly and annual emission limits. The existing sulfur content limitation was replaced with the more stringent requirement from the RICE MACT. These changes clearly fall within the criteria of a Class I Administrative Update either in 45CSR§13-4.2.a.4. Thus, the writer recommends to the Director to issue Permit R13-2659A to The Adjutant General's Department as the response for their Class I Administrative Update request.