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MEMORANDUM

To: Bev McKeone, NSR Program Manager
From: Ed Andrews, Reviewing Engineer 
Date: April 22, 2013
Subject: Class I Administrative Update Request of Permit R13-3204 for the Department of Veterans Affairs – VA Medical Center -Martinsburg

On September 12, 2016, VAMC filed a Class I Administrative Update request for the replacement of EG-8. EG-8 is an emergency generator set that is equipped with a 270 brake horsepower (bhp) diesel engine. This generator set has been removed from the facility. The Veterans Affairs (VA) has replaced this emergency generator set with a Caterpillar C9 ACERT generator set for emergency use which is identified as EG-15. This generator set is power with a 398 bhp diesel engine. The model for this engines has been certified by U.S. EPA under stationary emergency use only standards (Tier 3 Non-road Equivalent Standards).

A comparison of the potential emissions between the two generator set is presented in the following table:

| Pollutant | EG-8 | | EG-15 | | Change in Emissions |
|------------------|----------------|------------------|----------------|------------------|----------------------------|
| | (lb/hr) | (tons/yr) | (lb/hr) | (tons/yr) | (tons/yr) |
| NO _x | 8.37 | 2.09 | 1.96 | 0.49 | -1.60 |
| CO | 1.80 | 0.45 | 0.65 | 0.16 | -0.29 |
| SO ₂ | 0.11 | 0.03 | 0.004 | 0.001 | -0.03 |
| PM | 0.60 | 0.15 | 0.12 | 0.03 | -0.12 |
| VOC | 0.67 | 0.17 | 0.36 | 0.09 | -0.08 |

Even though the power output of the replacement generator set has increased beyond the output rating of EG-8, the hourly and annual emissions will decrease as result of this change. The engine for this new generator set than what has already have been incorporated into Permit R13-3204. Thus, VA request to update Permit R13-3204 may be considered as a Class I request under 45 CSR 13.

The engine for this is new generator set is subject to Subpart IIII to Part 60. VA has selected to comply with this regulation through the use of a certified compliance engine option under 40 CFR §60.4211(c). By regulation, the VA will be subject to the following requirements:

- Limited to 50 hours per year for maintenance/readiness checks (40 CFR 60.4211(f)) and additional 50 hours per year for non-emergency situations (40 CFR 60.4211(f)(2)).
- Use ultra-low sulfur diesel fuel (15 ppm max sulfur diesel) (40 CFR 60.4207(b) & 80.510(b)).
- Operate and maintain the engine according to the manufacturer's emission related written instructions. (40 CFR 60.4211(a)(1))
- Change only the emission related setting that are permitted by the manufacturer. (40 CFR 60.4211(a)(2))

These requirements are already established in Permit R13-3204 in Conditions 4.1.2. and 4.1.8. Thus, the only changes to Permit R13-3204 is to omit the emission limits for EG-8, which are less stringent than the NSPS standards that EG-15 are subject too and incorporate EG-15 under Condition 4.1.2.

Therefore, this writer recommends to the Director that Permit R13-3204A be issued to the Department of Veterans Affairs as a response to their Class I Administrative Update Request filed on September 12, 2016, which is in accordance with 45 CSR 13.