

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

N504027721

FACILITY: US EPA NATL VEHICLE&FUEL EMISSION		SRN / ID: N5040
LOCATION: 2565 PLYMOUTH RD, ANN ARBOR		DISTRICT: Jackson
CITY: ANN ARBOR		COUNTY: WASHTENAW
CONTACT:		ACTIVITY DATE: 11/12/2014
STAFF: Glen Erickson	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM 208A
SUBJECT: Scheduled inspection prompted by Rule 208(a) rescission letter from AQD to company.		
RESOLVED COMPLAINTS:		

Scheduled inspection of the National Vehicle and Fuel Emissions Laboratory (NVFUEL) of U.S. EPA located in Ann Arbor.

The original site inspection took place on 9-25-14, prompted specifically by the company's 8-19-14 submittal of information to establish that the stationary source is actually a true minor source of air pollution relative to Title V thresholds.

This true minor source demonstration was in response to the written request from AQD of 6-26-14 which informed the company that their Rule 208(a) registration, established in 1997, would soon be rescinded, and that the company would need to pursue 1 of 3 options:

1. Establish that the source is a true minor source of air pollution relative to potential to emit Title V thresholds;
2. Obtain an approved facility-wide permit to install establishing legally enforceable emission limits below the Title V major source thresholds;
3. Pursue an approved Title V ROP.

9-25-14:

Site inspection and meeting.

EPA personnel present during the meeting to discuss the company's 8-19-14 submittal of their true minor source demonstration, and subsequent inspection were:

Ruth Schenk, Quality Assurance Manager, 734, 214-4017, Maria Peralta, Advanced Testing Center Director, 734-214-4301, Greg Sturgell, Safety Officer, 734-214-4562, and George Abraham, Technical Staff, both with the Safety, Health & Environmental Management Office, and Steve Dorer, Facility Manager.

Scott Miller, Jackson AQD District Supervisor and myself were also present.

We provided EPA with the most recent decision from June, 2013 concerning chassis dynamometers sent to AQD staff from Vince Hellwig, AQD Division Chief in which he claims that chassis dynamometers have been determined to represent mobile sources of air pollution regulated under Title II of the CAA, and are not to be considered to be stationary sources regulated under Title V of the CAA.

Therefore, the table calculating PTE from the various Vehicle Test Sites at the facility, which are all chassis dynamometers should be deleted from the overall facility-wide PTE calculations.

My primary question about their PTE demonstration was the great disparity between this characterization of their PTE and the Rule 208(a) registration documentation submitted to AQD in 1997. For instance, the PTE for CO documented in 1997 showed PTE of 265 tons/year for CO, while their current characterization of PTE of CO of 11 tons/year.

Schenk described how their organization's mission has dramatically changed recently such that their activities do not include research and development, as they used to, since those functions have been transferred to another department within the agency. The result is that the only engines being tested at the NVFEL now are controlled with up to date emissions control systems.

I asked that Schenk re-submit her true minor source demonstration document with an explanation of the new mission and organization of NVFEL which involves only testing engines that have integral air pollution control systems. Also, that she removes the mobile source chassis dynamometers from the facility's PTE for Title V purposes.

Miller asked her to re-submit within 30 days, if possible, which Schenk indicated she should be able to meet.

We then toured the facility, going into their new "hot" and "cold" test cells where vehicles are tested at 90 degrees F, in one, and at 20 degrees F, in the other. These are both chassis dynamometers. They are in the process of installing a chassis dynamometer test cell for testing over the road tractor trailer diesel trucks, and buses.

We inspected their 2 dual fueled emergency generators, which run on a combined fuel train of diesel and natural gas. We calculated the BTU contribution from both fuels and found that they do not meet the definition of spark ignition engines. To determine if these emergency generators are subject to the compression ignition NSPS, Subpart IIII, the date of manufacture and date of order need to be identified, which we were not able to find at this time.

The hours of operation since installation was 279 hours on the non-resettable hours clocks.

The engine is made by Mitsubishi, with an apparent serial number of 6D24-393990 with a date stamped of 4-9-7, although it was unclear what that represented. The generator is a 300 KW unit that appears to be made by Generac. Dorer will find out the dates of order and manufacture, and if it is subject to IIII, he will also find the Tier III certification.

He claims that the diesel fuel meets the 15 ppm S requirement for ultra low sulfur diesel fuel, and he will find the latest fuel drop documentation.

Finally we inspected one of the diesel engine test cells where they were testing a diesel truck engine equipped with SCR NOx emission control which utilizes a liquid urea additive that is injected into the catalyst.

11-7-14 and 11-10-14:

Company submitted additional information on their test cells in response to questions I had to their PTE demonstration of their true minor source status relative to Title V.

The biggest difference in their operations today and when they originally received their Rule 208(a) registration is that they no longer conduct basic research on uncontrolled engine emissions. Such research has been shifted to DOE. This facility now only conducts tests on engines that meet their respective mobile source standards. The engines are all controlled. They are simply running the various testing cycles that the manufacturers are required to use to certify their various engine types.

The PTE demonstration thoroughly establishes that this facility is, indeed, a true minor source of air contaminants relative to Title V for all criteria air pollutants, and HAPs. Will remove them from MAERs reporting also.

NAME GEN ERICKSON

DATE 12-16-14

SUPERVISOR [Signature]