DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

N772774820

FACILITY: NISSAN TECH CENTER IN AMERICA		**SRN / ID:** N7727
LOCATION: 39001 SUNRISE DR, FARMINGTN HLS		**DISTRICT:** Warren
CITY: FARMINGTN HLS		**COUNTY:** OAKLAND
CONTACT: Mario Phillips , Corporate Service Manager-Facilities Operations		**ACTIVITY DATE:** 11/07/2024
STAFF: Mark Dziadosz	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: FY 25 Inspection		
RESOLVED COMPLAINTS:		

On Thursday, November 7, 2024, I, Michigan Department of Environment Great Lakes and Energy -Air Quality Division Staff Mark Dziadosz, conducted an announced inspection of Nissan Technical Center (N7727) located 39001 Sunrise Drive, Farmington Hills, Michigan. The purpose of the inspection was to determine compliance with the Federal Clean Air Act Part 55, Air Pollution Control, of Natural Resources and Environmental Protection Act of 1994, PA 451, as amended, and Michigan Department of Environment, Great Lakes and Energy (EGLE-AQD) Administrative Rules.

I arrived at the facility at 10:00 A.M. and met Mario Phillips, Corporate Service Manager, Midwest Region, Facilities Operations and Mike Bristol, Director of Engineering Safety Design, Performance, Test, and FH Lab Operations.

During the pre-inspection meeting, we discussed the facilities operations. The site is composed of three groups: Engineering, Styling, and Prototype/Testing. Any air emissions would likely come from the Prototype/Testing Group. Operations include supplier validation testing, mileage validation testing, chassis dynamometer testing and emissions testing (during chassis dynamometer testing).

PTI No. 343-06 was approved in December 2006 for the installation of two dynamometer engine test cells. However, at that time, the facility only installed one dyno test cell. PTI No. 343-06 was voided on 4/11/2023.

After the meeting, we conducted a facility inspection. During the inspection I verified the dynamometer test cells that had been permitted under PTI 343-06 had been removed. There was a fuel farm (Fuel farm #3) dedicated to the dynamometers which has also been removed.

The facility has a machine shop which contains two welding stations, a bandsaw, a lathe, and sandblast which are all vented into the general in-plant area. These processes are exempt from permit to install requirements pursuant to Rule 336.1285 (2)(i) and Rule 336.1285(2)(vi).

Three chassis dynamometers are installed. Assembled vehicles are tested. AQD considers the chassis dynamometer as an exempt emission unit, since an assembled vehicle is considered a mobile source. Federal Test Procedure 75 is the typical test conducted at the chassis dynamometer. The vehicle is typically run at an equivalent distance of about 10 miles. One of the chassis dynamometer test cells has 2 dynamometers, one for each axle. Carbon monoxide monitoring is done during the chassis dynamometer testing. Fuel farm #2 supplies fuel for these operations.

The facility has a small paint spray booth and associated paint storage area. Typically, the booth is used whenever a vehicle is being prepared for a car show which is about 4-5 cars per year. The coating usage is not above 200 gallons total in a year and is tracked by the facility. Filters are changed according to the PM program, but typically once/yr. Mario was able to show me new, unused filters. The paint spray booth is exempt from permit to install requirements pursuant to Rule 336.1287(2)(c).

The facility has 4 solvent degreasers using mineral spirits, no halogenated solvents, serviced by Safely Kleen. The lid was closed at the time of the inspection and procedures were posted. The degreasers are exempt from permit to install requirements pursuant to Rule 336.1281(2)(h).

The facility conducts fuel tank vapor canister testing. A vapor canister is an emission control device inside the gasoline tank where gasoline vapors are captured during fuel fill up and idling and vapors are later released inside the gasoline tank. In the fuel tank vapor canister test, diluted butane is used instead of gasoline. Typically, 4 to 5 canisters are tested daily. Emissions are low. The facility uses about twelve 25 lb butane tanks each year for the canister testing.

Heating to the facility is supplied by 4 natural gas fired boilers with a capacity of approximately 5 MMBtu/hr. Due to the size of the boilers, they are not subject to 40 CFR 60, Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. There are also 2 hot water heaters with a capacity of about 285,000 BTU/hr. The boilers and hot water heaters are exempt from the requirement to obtain a permit to install by R 336.1282 (2)(b)(i).

The facility has a Cummins, diesel fueled (compression ignition), 450 kW, emergency generator, installed in 2018. This is a new (installed after June 12, 2006) emergency generator located at an area source of Hazardous Air Pollutants subject to 40 CFR 63, Subpart ZZZZ- National Emissions Standards for Hazardous Air Pollutants (NESHAP). AQD does not have authority to enforce this NESHAP at area sources. The emergency generator is also subject to 40 CFR 60, Subpart IIII-New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines. Compliance with ZZZZ is achieved by meeting the requirements of IIII. Compliance with IIII is achieved by purchasing an emergency generator that is certified to meet the Tier II emission standards and following maintenance according to the manufacturer. According to information provided by Nissan, the engine is certified to the emission standards. Nissan is keeping track of hours of operation and maintenance is performed by Cummins.

Conclusion: Based on the information gathered during the facility inspection, Nissan Technical Center appears to be in compliance with the Federal Clean Air Act Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act of 1994, PA 451, as amended.

NAME _____ DATE 12-04-2024 SUPERVISOR _____