

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

N756429332

FACILITY: MARTIN TECHNOLOGIES		SRN / ID: N7564
LOCATION: 55390 LYON INDUSTRIAL DR., NEW HUDSON		DISTRICT: Southeast Michigan
CITY: NEW HUDSON		COUNTY: OAKLAND
CONTACT: Brian Jones , Vice President		ACTIVITY DATE: 01/14/2015
STAFF: Samuel Liveson	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled Inspection of an Opt-Out Source.		
RESOLVED COMPLAINTS:		

On January 14, 2015 I conducted an unannounced, scheduled, level 2 inspection of Martin Technologies, located at 55390 Lyon Industrial Drive in New Hudson, Michigan. The purpose of this inspection was to determine the facility's compliance with the federal Clean Air Act, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and Permit to Install (PTI) No. 352-05.

I arrived at Martin Technologies at approximately 9:45 am. I met with Mr. Brian Jones, Vice President, who provided a walkthrough of the facility and explained equipment and operations. I presented my credentials and provided Mr. Jones with a copy of "DEQ Environmental Inspections: Rights and Responsibilities."

Pre-Inspection Meeting/Facility Overview

Martin Technologies provides power train engineering services for original equipment manufacturing (OEM) companies. This includes tubework design and engineering, as well as machining of design parts. According to Mr. Jones, Martin Technologies currently has about 13 employees and operates from 8:00 am to 5:00 pm Monday through Friday, with a second shift periodically.

Site Walk-Through

The engine room is an assembly area for hand-built engines. Equipment from this room is washed in two cold cleaners that use mineral spirits. Both cold cleaners were closed at the time of the inspection but no operating instructions were visible. I used discretion to avoid issuing a violation notice via R 611(3). I provided Mr. Jones with new operating procedures to post on each cold cleaner. These cold cleaners appear to be exempt from permitting requirements via R 281(h).

The manual machine shop nearby the engine room has machining equipment such as a band saw and lathe. Dry cutting and machining for the engine build occur here. The machining equipment does not appear to emit to ambient air, and so is exempt from permitting requirements via R 285(vi)(B).

PTI No. 352-05

PTI No. 352-05 is for four engine dynamometer test cells using gasoline fuel. All cells are currently on the property, although Mr. Jones said that fuel use for the dynamometers is steadily decreasing each year as engine testing becomes a smaller part of the business.

Dynamometer test cells numbers 1 through 3 are eddy current dynamometers. The eddy current absorbs the energy generated from the engine during engine testing. These three dynamometers receive their fuel from an outdoor above ground storage tank (AST). The tank has two bladders that currently both hold unleaded fuel. The fuel generally has an octane level of 89 or 87, similar to any gas station. Fuel is purchased from either Corrigan or Atlas. Gasoline from this AST is primarily used for on-road tests with vehicles from Martin Technologies. When the gasoline is used for a dynamometer test, a detailed schedule is put in place and data is recorded to measure fuel rate usage in pounds per hour according to Mr. Jones. Mr. Jones recalls that about October of 2014 was the last time fuel was purchased for road tests, and the last time it was purchased for dynamometer tests was in February of 2014.

Cell number 1 is unique in that it includes a chiller that electrically pumps cold water through the dynamometer to measure the changing engine dimensions.

Dynamometer test cell number 4 is from the company SuperFlow. It runs on diesel that is input into a small 1.5 gallon container on the side of the test cell.

Novi Facility

According to Mr. Jones, Martin Technologies is planning to open a vehicle assembly facility in Novi in the near future. Mr. Jones does not think any air use permits will be required at the new facility because it will mainly be machining. There will be a lift and other machines.

Stacks

Because of safety concerns from wintery conditions we did not visit the facility roof. I was able to observe all four stacks from the roadway. All stacks were unobstructed and appeared to have a diameter of less than four feet per PTI No. 352-05 Special Condition (S.C.) 1.7. No discoloration or signs of opacity or fallout were observed.

Recordkeeping

Although Martin Technologies historically has very low emissions relative to their permit limits, Operational Memorandum 13 explains that the MAERS database includes "sources that have obtained and are operating under an 'Opt-out Permit,'" such as Martin Technologies. Therefore, Martin Technologies was added to the MAERS database in 2013 and submitted records to MAERS for the 2013 year.

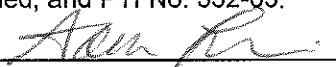
Martin Technologies did not provide records after the inspection until April 29, 2015, and received a Violation Notice for the records delay. The delay can be attributed to a shoulder surgery and extended absence that Mr. Brian Jones underwent after the inspection. Because records and a response to the Violation Notice were received, the violation appears to be resolved.

Martin Technologies provided leaded and unleaded gasoline fuel use and emissions records per S.C. 1.4 and S.C. 1.6, as well as carbon monoxide (CO) emissions per S.C. 1.5. These records span from January of 2014 to December of 2014. According to these records, Martin Technologies emitted 0.6 tons of CO in 2014, well below their permit limit of 89.5 tons per year (tpy) per S.C. 1.1b. These emissions are calculated using the emission factor of 3.12 lb CO/ gallon gasoline per S.C. 1.1a. The facility used 342 gallons of unleaded gasoline, below their permit limit of 56,000 gallons per 12-month rolling time period per S.C 1.2, and the facility used 34 gallons of leaded gasoline, below their permit limit of 200 gallons per 12-month rolling time period per S.C 1.3.

Compliance Determination

As a result of this inspection, it appears that Martin Technologies is in compliance with the federal Clean Air Act, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and PTI No. 352-05.

NAME



DATE

5/8/2015

SUPERVISOR

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