

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

N668137771

FACILITY: MICHIGAN AVIATION		SRN / ID: N6681
LOCATION: 6150 HIGHLAND RD, WATERFORD		DISTRICT: Southeast Michigan
CITY: WATERFORD		COUNTY: OAKLAND
CONTACT: Charles Opie , General Manager		ACTIVITY DATE: 11/02/2016
STAFF: Samuel Liveson	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Self-initiated inspection of a minor source.		
RESOLVED COMPLAINTS:		

On November 2, 2016, I conducted an unannounced, self-initiated, level 2 inspection of Michigan Aviation Corporation (Michigan Aviation), located at 6150 Highland Road in Waterford, 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 (NREPA); and the Air Pollution Control Rules.

I arrived on site around 1:40 PM. I met with Mr. Charlie Opie, General Manager. Mr. Opie provided records and a walkthrough of the facility. I provided Mr. Opie with my contact information. I originally visited yesterday morning but was asked to return another time when the General Manager would be in.

Opening Meeting

Michigan Aviation is a fixed-base operator (FBO). Among aeronautical services provided, the company sells fuel, conducts engine repair, and operates an avionics shop where radios are repaired. The four hangars on site and office building are open from 6:00 AM to 10:00 PM seven days a week for arrivals and departures. The six company mechanics operate from 8:00 AM to 4:30 PM Monday through Friday, and Saturday if needed.

According to Mr. Opie and from my facility walkthrough, there are no emergency generators or process-related boilers on site.

Facility Walk-Through

Four hangars on site are used for airplane storage. Among the hangars are several cold cleaners; a painting area; an avionics shop; some blast-cleaning equipment; a machine shop; and an engine shop.

Cold Cleaner - Hangar

A cold cleaner on site uses mineral spirits. Mr. Opie demonstrated that the mineral spirits drain to a container below. The mineral spirits are recycled through the unit and replaced periodically by Heritage-Crystal Clean. The unit was open upon visiting; I asked Mr. Opie to keep the unit closed. At the end of my inspection I provided orange Cold Cleaner Operating Procedures to the owner to post on the cold cleaners. The unit appears to be exempt from obtaining a Permit to Install per R 281(h). Mr. Opie provided a safety data sheet (SDS) of the mineral spirits.

Cold Cleaners – Exhaust Room

Two cold cleaners are located on site in a room provided with positive pressure through an electric air compressor. Air exhausts through a vent located on an exterior wall. Both cold cleaners currently contain immersion cleaner; however, the first usually contains methyl ethyl ketone (MEK). Both cold cleaners were closed. Operating instructions were posted conspicuously, but they had darkened over time and were difficult to read. I provided

operating instructions to post. Both cold cleaner units appear to be exempt from obtaining a Permit to Install per R 281(h). Mr. Opie provided SDSs of both the immersion cleaner and MEK.

In a follow-up phone conversation on November 21, I discussed concerns about flammability inside this exhaust room with its two cold cleaners. Mr. Opie explained that when the insurance company and fire marshal visited the room about ten years ago, Michigan Aviation acted upon their recommendation to ground all equipment in the room to avoid sparks, and to make all switches external. Additionally, OSHA inspected the facility several months ago. The air compressor to dissipate fumes turns on whenever the light switch is turned on.

Engine Painting – Exhaust Room

Painting of engine parts with aerosol spray cans occurs in the exhaust room, as well as periodic painting of engine parts using a handheld spray gun. Mr. Opie showed me aerosol spray cans stored in a yellow flammable storage cabinet. Aerosol spray can surface coating appears to be exempt from obtaining a Permit to Install per R 287(b).

Spray gun painting appears to be exempt under Rule 290. Mr. Opie provided paint purchase records and safety data sheets for paint used in 2016. The most purchased was about 1.3 gallons in August of 2016, which equates to less than 20 pounds. No paint used in the last year appears to contain any compound with an initial threshold screening level (ITSL) or initial risk screening level (IRSL) below 0.04 micrograms per cubic meter.

Michigan Aviation attaches a mesh filter to an exterior wall vent when painting. I told Mr. Opie that if the rate of painting were to increase, the facility would need to install a proper paint booth.

Machining Equipment

A machine shop on site has a valve grinder, drill press, and lathe to do metal grinding and engine repair. An engine shop on site has clamps and shop tools. A vehicle shop on site is seldom used and has welding operations that appear to be exempt from obtaining a Permit to Install per R 285(i). An avionics shop on site has electronics equipment to work on airplane radios. Also on site is a band saw to perform sheet metal work. The machining equipment on site appears to be exempt from obtaining a Permit to Install per R 285(l)(vi)(B).

Blast Cleaning Equipment

Michigan Aviation has two sandblasting units from Trinco Tool Company. One contains walnut shells, and the other contains glass beads. Both units exhaust indoors and have fabric filters in place. These units appear to be exempt from obtaining a Permit to Install per R 285(l)(vi)(B).

Storage Containers

Hydraulic oils are stored on site in small sizes from quart to two gallon. Some half-filled 5-gallon buckets of oil had open tops; Mr. Opie explained that these were currently being emptied into a 200 gallon waste oil drum that is emptied twice a year or so. Waste oil comes from changing the oil on airplanes. Additionally, Red Dye Diesel fuel is stored for fueling on-site vehicles. These storage containers appear to be exempt from obtaining a Permit to Install per R 284(c) and (d) respectively.

Facility Fee Category III Removal

Michigan Aviation was a Category III fee-subject facility with a \$250 annual fee. Mr. Opie supposed this is due to cadmium electroplating which used to occur at the facility but was

disbanded around 1988. Additionally, the facility does not appear to be subject to 40 CFR Part 63 Subpart T for Halogenated Solvent Cleaning. Solvent cleaning machines on site do not appear to contain methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5) or chloroform (CAS No. 67-66-3), or any combination of these halogenated solvents per paragraph §63.460(a) of the subpart. I informed Dennis McGeen of the Air Quality Division Emissions, Reporting and Assessment Unit to remove Michigan Aviation from the Category III fee-subject source list.

Conclusion

Based on the AQD inspection and records review, it appears that Michigan Aviation is in compliance with the federal Clean Air Act, NREPA, and the Air Pollution Control Rules.

NAME *San R.* DATE 12/2/2016 SUPERVISOR SK