

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

U-63-14-0601

U6314060135387

FACILITY: Michigan Custom Machines (MCM)		SRN / ID: U63140601
LOCATION: 22750 Heslip Dr., Novi		DISTRICT: Southeast Michigan
CITY: Novi		COUNTY: OAKLAND
CONTACT: <i>[Signature]</i>		ACTIVITY DATE: 06/20/2016
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: FY 2016 inspection of Graphic Michigan Custom Machines ("MCM")		
RESOLVED COMPLAINTS:		

U 63 14 0601 - SAR - 2016 06 20

Michigan Custom Machines (MCM) (U-63-14-0601)
 22750 Heslip Dr.
 Novi, Michigan 48376-4143

www.mcm1.com
 1-248-347-7900

Rules: 287(c), 281(h), 285(r)

Not Subject to: NESHAP/ MACT T, area source National Emission Standards for Hazardous Air Pollutants: Halogenated Solvent Cleaning (40 CFR, Part 63, Subpart T; NESHAP/ MACT T); Correction; 29484 Federal Register / Vol. 60, No. 107 / Monday, June 5, 1995 / Rules and Regulations; amended National Air Emission Standards for Hazardous Air Pollutants: Halogenated Solvent Cleaning (40 CFR, Part 63, Subpart T); Final Rule; Page 25138 Federal Register / Vol. 72, No. 85 / Thursday, May 3, 2007 / Rules and Regulations. Solvents containing halogenated compounds are not used.

On June 20, 2016, I conducted a level 2 self-initiated inspection of Graphic Michigan Custom Machines ("MCM") located at 22750 Heslip Dr., Novi, Michigan 48376-4143. The inspection was conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451 and Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) administrative rules.

During the inspection, Mr. Keith Rogalski (Phone: 248-662-3244 or 248-347-7900-ext. 244; Cell: NA; Fax: 248-347-3064; E-mail: Keith.Rogalski@mcm1.com), Production Manager, and Mr. Rob Stough, Painter, assisted me.

Mr. Kirk Karem (Phone: 248-662-3273 or 248-347-7900-ext. 273; Cell: NA; Fax: 248-347-3064; E-mail: Kirk.Karem@mcm1.com), Shop Manager, separated about March 2014.

For over two decades (since 1994), MCM is making / assembling fuel injector test machines. MCM is in this building for about 11 years (since ≈2005). MCM is on the list of Inc. Magazine's 500 fastest growing companies: 2008 growth 75% and 2009 growth 109%.

MCM assembles the following unique test machines:

1. Hydraulic hybrid test machine
2. Fuel pump module endurance tester

3. Gasoline fuel injector calibrator
4. Diesel pump production test bench
5. Steering column lock endurance tester
6. Transmission fluids test machines
7. Rocker arm validation test machines

The customers include GM, NSK, Husco, Borg-Warner, etc.

Rule 287(c) Paint Spray Booth

One solvent-based paint spray booth (12 ft. Width x 25 ft. Depth x 15 ft. Height) with a back-draft dry filter system is present. 20 filter panels are present. Three layers of filters are used according to the painter after a previous AQD inspection. All coatings / paints are solvent-based. Primer and topcoat paints are used; no clearcoat paints are used. Paint usage records are not kept; Mr. Rob Stogh, Painter, stated that about 20 gallons of paint per month were used. HVLP guns are used. Intake air filters are also present.

After MIOSHA inspection (about 2015), one Dawyer Mark II inclined manometer with red dye water was installed to measure pressure differential across the filters (ΔP). During the FY 2016 inspection, ΔP reading was 0.0 inches of water when the booth was idle and ΔP reading was 0.3 inches of water upon starting the booth's fan. The filters are changed when $\Delta P \approx 0.4$ inches of water.

I asked the painter to install and inspect the filters such that they fit, at all times, snugly without gaps and holes. I also asked him to keep records of paint and solvent usage according to Rule 336.287(c).

The booth is exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.287(c).

Upon keeping usage records, the coating booth meets all of the Rule 336.1287(c) conditions:

1. The coating use rate is not more than 200 gallons, as applied, minus water, per month.
2. Any exhaust system that serves only coating spray equipment is supplied with a properly installed and operating particulate control system.
3. Monthly coating use records are maintained on file for the most recent 2-year period and are made available to the air quality division upon request.

Machines

Lathes, surface grinders, belt sanders, chap saw, etc. are present. The machines do not exhaust to outside ambient air. The machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.285.

Cold-cleaner

There is one Graymills 3'x4' parts / cold-cleaner with spray a solvent tank. The cold-cleaners are subject rule 336.611 or 336.1707 depending on if it is new or existing. A cold-cleaner is exempt from Rule 336.1201 pursuant to Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

One unit may be described as a "soaker tank". Soaker does not have a drum. Mineral spirits, a low vapor pressure organic solvent, is used as a cleaner.

Mineral spirits containing no halogenated solvents is used. The Cold-cleaners are NOT Subject to: 40 CFR, Part 63, Subpart T, NESHAP/ MACT T, since solvents containing halogenated compounds are not used.

During FY 2014 inspection, I gave DEQ's decals for "cold-cleaner operating procedures" for posting and complying with work-practice rules. I asked the company to follow the common sense work practice in the procedures. During the FY 2016 inspection, the procedures were posted. Mechanically assisted lid was closed. The cold-cleaner is idled for a couple of years.

Mineral Spirits 100% VOC solvent (Sherwin-Williams of Cleveland 216-566-2917)

100% VOC solvent. Flash Point (FP) = 100 °F TCC. Auto Ignition = NA °F. Boiling Point (BP) = 300-395 °F @ 760 mm Hg. Vapor Pressure (VP) = NA mm Hg at 68 °F. Specific Gravity (SG, Water = 1.0) = 0.76. Density (ρ) @ 68 °F = 6.35 lbs / gallon (0.760 kg /L). Flammability range = 1 %v (LEL) – 6%v (UEL).

Test equipment

Each test equipment is equipped with Donaldson cartridge filter system. Pulse-jet air is used to clean the filters. The test equipment that has glossy paint on it although clearcoat is not used is tested before shipment. Test equipment with filters are only tested here; however, they are used by customers continuously.

The filtered air from the test equipment do not exhaust to outside ambient air. The testing test equipment is exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.285.

Miscellaneous

Acetylene-oxygen torch is used for welding. Argon is used for cooling welding. Nitrogen is used as a pure (moisture-free, dust-free) gas for an instrument calibration.

Conclusion

The paint spray booth (Rule 287(c)) and cold-cleaner (Rule 281(h) or Rule 285(r)(iv)) are exempt from Rule 336.1201 (Permit-to-Install).

NAME J. Kenanahall DATE 07/06/2016 SUPERVISOR CTE

