


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

U6311017024115

FACILITY: Frimo, Inc.		SRN / ID: U63110170
LOCATION: 50685 Century Court, Wixom		DISTRICT: Southeast Michigan
CITY: Wixom		COUNTY: OAKLAND
CONTACT:		ACTIVITY DATE: 10/01/2013
STAFF: Iranna Konanahalli 	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: FY 2014 inspection of Frimo, Inc. ("Frimo"), located at 50685 Century Court, Wixom, Michigan 48393-2066.		
RESOLVED COMPLAINTS:		

Frimo, Inc. (U-63-11-0170)
50685 Century Court
Wixom, Michigan 48393-2066

Phone: (248) 668-3147

Permit-to-Install: Rules 285, 287 exempt process equipment.

On October 01, 2013, I conducted a level 2 self-initiated inspection of Frimo, Inc. ("Frimo"), located at 50685 Century Court, Wixom, Michigan 48393-2066. 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. Ray Lukasik (Phone: 248-668-3147; Fax: 248-668-3040; Cell: 248-939-3056; E-mail: lukasik.r@frimo.com), Operations Director, assisted me.

Frimo, an American subsidiary of a German Frimo company is a builder of interior automotive tooling and machinery. Polyurethane (PU) is used as insulation material for refrigerators, in upholstered furniture or sport articles. In the automotive industry instrument panels, door trims, headliners, seats, headrests, steering wheels or bumpers and spoilers are typical applications. At this Wixom facility, prototype equipment is present. Also, urethane foaming, vacuum foaming, press laminating, NC cutting, lathes, milling, cutting equipment are present.

Frimo builds, repairs, services tools and equipment for:

1. Polyurethane processing
2. Polyurethane spraying
3. Flexible trimming
4. Polyurethane foaming
5. Punch press
6. Thermo foaming
7. Laminating
8. Edge folding
9. Joining and gluing

One laminating machine is present with practically no air quality impact.

Two foaming machine are present. Polyols and isocyanates are metered, mixed in a mixing head and foam is inserted into a part. Foaming chemical reaction takes place when the two components are mixed. Thus inserted foam is cured for 2 minutes.

Polyurethane spray booth (287(c))

Polyurethane spray booth with back-draft filters on the back wall is present. Exhaust gases are discharged outside. Mold release agent is sprayed using a robot. Then in-mold coating is sprayed. Both paints and mold release agents are water based. About 0 gallons per month of release agents and 0 gallons per month of polyol and isocyanate mixture are used at this time as the spray equipment is leased out to GE. Polyurethane skins are produced. Hot water is used for cleaning.

At this time (FY2014) GE is using the spray equipment out of state via lease agreement. Hence, the booth is idle (FY2014).

I asked Mr. Lukasik to install the filters such that they fit, at all times, snugly without gaps and holes. I also asked him to keep records of paint, mold-release agent and solvent usage. I asked him to change or check filters when the pressure drop across the filters is out of the ordinary for good working conditions.

The booth is exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1287(c). The booth is a small source of VOC emissions. The booth is idle at this time (FY 2014).

Misc. equipment

IR welding machine for plastics with IR (Infra Red) lights to heat plastics, foaming area, laminating area are present.

Cutting and grinding machines

CNC (increased 6 → 7; in January 2013 one additional machine was installed), cutting, trimming machines for plastic or aluminum parts are present. Each machine is equipped with a particulate matter capture device and a ventilation system. Each ductwork from a machine is connected to a common manifold. The manifold is ducted outside to a baghouse. After filtration of plastic or metallic particulate matter, clean air is recycled into the plant in heating season (winter) and discharged to outside air in cooling season (summer). Two 55-gallon drum hoppers are present. The bags are cleaned using a shaker mechanism.

About 2013, five mist busters are installed in CNC area to improve indoor air quality by removing coolant mist. Of total five mist busters, 4 units consist of 3 cartridge filters each and one unit consists of 4 cartridge filters.

The cutting machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(l). I asked Mr. Lukasik to empty the hoppers promptly so that damage to bags was not caused and spill did not occur.

Wood cutting and grinding machines

There are five wood cutting (saw) machines. Three spray mask booths, drills, presses, lathes, welding machines are present. Each machine is equipped with a capture device and a ventilation system. Each ductwork from a machine is connected to a common manifold. The manifold is ducted outside to a baghouse. After filtration of plastic or metallic particulate

matter, clean air is recycled into the plant in heating season (winter) and discharged to outside air in cooling season (summer). Two 55-gallon drum hoppers are present. This baghouse located about 100 feet away from the above baghouse. The bags are cleaned using a shaker mechanism.

The machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285 (l). I asked Mr. Lukasik to empty the hoppers promptly so that damage to bags was not caused and spill does not occur.

287 (c) paint spry booth

16 ft W * 24 ft. D * 10 H paint spray booth is present. Glue and paint is sprayed in the booth. Back draft filters are present. About 5 gallons per month glue 2 gallons per month paint (oil based) is used. I asked Mr. Lukasik to install 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. The exhaust gases are discharged to outside ambient air via stack with a rain flapper.

Conclusion

Spray booths, plastic / metal cutting and wood cutting machines are exempt from Rule 336.1201 per Rules 287, 285.

NAME

J. L. Hannahall

DATE

01/21/2014

SUPERVISOR

CTE