

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

N338424351

FACILITY: PROGRESSIVE METAL MFG CO		SRN / ID: N3384
LOCATION: 1300 CHANNING, FERNDALE		DISTRICT: Southeast Michigan
CITY: FERNDALE		COUNTY: OAKLAND
CONTACT: Eric Borman , President		ACTIVITY DATE: 01/23/2014
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: FY 2014 self-initiated inspection of Progressive Metal Manufacturing Company ("Progressive")		
RESOLVED COMPLAINTS:		

**Progressive Metal Manufacturing Company (N3384)**  
1300 Channing Street  
Ferndale, Michigan 48220-2606

**PTI No. 45-92 dated April 22, 1992, for 3 MIG (Metal Inert Gas) and 4 TIG (Tungsten Inert Gas) welding stations.**

On January 23, 2014, I conducted a level 2 self-initiated inspection of Progressive Metal Manufacturing Company ("Progressive") located at 1300 Channing Street, Ferndale, Michigan 48220-2606. 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. David Behrendt (Phone: 248-546-2827-ext. 1213; Cell: 248-396-1011; E-mail: [dbehrendt@pmmco.com](mailto:dbehrendt@pmmco.com)), Plant Manager, and Gary Mitchel (Phone: 248-246-6134; Cell: 248-310-2354; E-mail: [gmitchel@pmmco.com](mailto:gmitchel@pmmco.com)), IT, assisted me.

Mr. Eric Borman (Phone: 248-246-6106; Cell: 248-302-8090; E-mail: [eborman@pmmco.com](mailto:eborman@pmmco.com)), President, was not present.

Progressive operates two manufacturing facilities in Michigan: one in Ferndale (fabricating and welding) and other in Warren (welding, assembly and warehousing).

Founded in 1962, Progressive has over 70,000 sq. ft. manufacturing space. About 95 employees work at Ferndale facility. Progressive manufactures ferrous and non-ferrous metal parts (80% steel, 19.5% aluminum and 0.5% other such as copper) for automotive, truck, farming equipment, defense, etc., industries.

Progressive has joined together three buildings for manufacturing.

No paint spray booth is present; one was removed about 10 years ago (about 2003).

#### **Machining area**

Saws and metal machining equipment are present. There is no exhaust for any these machines. The machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(l).

#### **7 stamping machines**

None of seven stamping machines has an exhaust. The stamping machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(l).

#### **6 welding machines**

Six welding machines have no exhaust. The welding machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(l). PTI No. 45-92 covers welding.

**Grinding metal parts with downdraft filter**

There are grinding stations equipped with downdraft filters (Diversi Tech Inc. Downdraft). Exhaust gases are released in-plant. The grinding machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(l).

**Sandblast cabinet**

One sandblast cabinet is present. A cyclone recovers sandblast abrasive material. The recovered material is reused. No exhaust to outside ambient air. The sandblast machine is exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(l).

**Cold-cleaner**

There is one Safety-Kleen 3'x4' parts cold-cleaner with spray a brush and 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 parts cleaner unit may be described as a "sink on a tank". The solvent is stored in the tank (enclosure reservoir) of about 30 gallons capacity. Parts are placed in the sink area and solvent is pumped over the part. The solvent then drains back into the tank. Mineral spirits, a low vapor pressure organic solvent, is used as a cleaner.

Safety-Kleen (800-468-1760) supplies the solvents and services the cold-cleaners. 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.

On November 1, 2012, I sent 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 procedures as stated in the decal.

Per Borman's e-mail (01/30/2014), the unit is not used in production anymore. However, the unit is used periodically by the maintenance group.

Safety-Kleen Solvent 105 Virgin is used. Product Code 6610

CAS # 64742-47-8 Petroleum Distillate. 100% VOC solvent. Flash Point (FP) = 105 °F TCC. Auto Ignition = 410 °F. Boiling Point (BP) = 310 °F @ 760 mm Hg. Vapor Pressure (VP) = 0.6 mm Hg at 68 °F. Specific Gravity (SG, Water = 1.0) = 0.77-0.80. Density (ρ) @ 68 °F = 6.59 lbs. / gallon (0.790 kg /L). Flammability range = 0.7 %v (LEL) – 5%v (UEL).

**Laser cutting machines**

The company operates several laser cutting machines: Nos. 2, 3, 4 & 6. About March 2011 No. 6 replaced No. 5, which was sold prior to installing No. 6. FY 2012 inspection report and Violation Notice do not use laser cutting machines numbers correctly but the facts are correct.

**November 1, 2012, Violation Notice**

AQD issued November 1, 2012, Violation Notice for failure to comply with Rule 336.1201 (Permit-to-Install) for Laser Cutting Machine Nos. 4 & 5.

In lieu of obtaining Permit-to-Install according to Rule 336.1201, like Laser No. 6, Progressive may install and operate properly appropriately designed and operated fabric filter or cartridge filter with pre-cleaning cyclone to protect filters from relatively large metal particles; large particles may cause wear and tear damage to the filter media upon impact due to their higher momentum. The filtered (and cleaned of metal particles) exhaust gases

may be discharged in-plant like Laser No. 6 (with Donaldson Torit Filter) or to outside ambient air like the existing set-up for Laser Nos. 4 & 5. These conditions are based upon Rule 336.1285(I)(vi)

If Progressive satisfies Rule 336.1285(I)(vi), the November 1, 2012, violation will be resolved because Laser Nos. 4 & 5 will be exempt from Rule 201.

Please refer to November 1, 2012, Violation Notice for additional details.

### **Laser cutting machines**

Each of laser cutting machine Nos. 3, 4 & 6 (No. 5 was sold) is equipped with one Donaldson Torit Filter consisting of cartridges for air filtration. The dust cake on the filters is cleaned using pulse-jet air. 55-gallon drum is used has hopper to store dust collected due to pulse-jet air cleaning from No. 6. Nos. 3 & 4 are served by one common Donaldson Torit Filter equipped with two 55-gallon drums for dust collection.

Exhaust air from each Donaldson collector is released to in-plant environment; no exhaust to outside ambient air. Therefore, the laser cutting machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(I).

Laser cutting machine Nos. 2 is equipped with RoboVent (888-ROBO-VENT) system consisting of 18 cartridges with pulse-jet air cleaning and one 55-gallon drum for particulate collection.

All 55-gallon drums associated with filter systems are checked once per week and emptied once per month.

### **Deburr Machines**

Two deburr machines (one for steel and one for aluminum) are present. Each machine is equipped a filter system and one 55-gallon drum (two drums in all) to hold collected dust.

The machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(I).

### **Conclusion**

The laser cutting machines satisfy the conditions of Rule 336.1201 (Permit-to-Install) exemption upon installing additions filter systems. AQD issued November 1, 2012, Violation Notice.

**FY: VN**

November 1, 2012

Mr. Eric Borman, President  
Progressive Metal Manufacturing Company  
1300 Channing St.  
Ferndale, Michigan 48220-2606

SRN: N3384, Oakland (63) County

Dear Borman:

### **VIOLATION NOTICE**

On October 16, 2012, the Department of Environmental Quality (DEQ), Air Quality Division (AQD), conducted an inspection of Progressive Metal Manufacturing Company ("Progressive") located at 1300 Channing St., Ferndale, Michigan. The purpose of this inspection was to determine Progressive's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the administrative rules and the conditions of Permit to Install (PTI) number 45-92 dated April 22, 1992.

During the October 16, 2012, inspection, staff observed the following:

Process Description	Rule/Permit Condition Violated	Comments
Laser Cutting Machine Nos. 4 & 5	Rule 336.1201 (Permit-to-Install)	Progressive Metal Mfg. Company installed laser cutting machines without obtaining a Permit-to-Install. <sup>θ</sup>
<sup>θ</sup> In lieu of obtaining Permit-to-Install according to Rule 336.1201, like Laser No. 6, Progressive may install and operate properly appropriately designed and operated fabric filter or cartridge filter with pre-cleaning cyclone to protect filters from relatively large metal particles; large particles may cause wear and tear damage to the filter media upon impact due to their higher momentum. The filtered (and cleaned of metal particles) exhaust gases may be discharged in-plant like Laser No. 6 (with Donaldson Torit Filter) or to outside ambient air like the existing set-up for Laser Nos. 4 & 5. These conditions are based upon Rule 336.1285(I)(vi).		

During this inspection, it was noted that Progressive had installed and commenced operation of unpermitted process equipment (Laser Cutting Machine Nos. 4 & 5) at this facility. The AQD staff advised Progressive on October 16, 2012, that this is a violation of Act 451, Rule 201.

A program for compliance may include a completed PTI application for the Laser Cutting Machine Nos. 4 & 5. An application form is available by request, or at the following website:

[http://www.deq.state.mi.us/aps/nsr\\_information.shtml#AUP](http://www.deq.state.mi.us/aps/nsr_information.shtml#AUP)

Be advised that Rule 201 requires that a permit be obtained prior to installation, construction, operation, reconstruction, relocation, or alteration of any process or process equipment which may be a source of an air contaminant.

**A permit application is not necessary if the conditions of Rule 336.1285(I)(vi) are satisfied as stated above.**

Please initiate actions necessary to correct the cited and **submit a written response to this Violation Notice by November 26, 2012. The written response should include: the dates the occurred; an explanation of the causes and duration of the ; whether the ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.**

If Progressive believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Thank you for your attention to resolving the cited above and for the cooperation that was extended to me during my inspection of Progressive. If you have any questions regarding the or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,

Iranna Konanahalli

Air Quality Division  
586-753-3741

ISKJ/vll

cc/via email: Ms. Lynn Fielder, DEQ  
Ms. Teresa Seidel, DEQ  
Mr. Thomas Hess, DEQ  
Mr. Chris Ethridge, DEQ

NAME Iranna Konanahalli DATE 02/20/2014 SUPERVISOR CTE