

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

U2514245524951

FACILITY: Michigan Steel Fabricators, Inc.		SRN / ID: U25142455
LOCATION: 5225 Energy Drive		DISTRICT: Lansing
CITY: Flint		COUNTY: GENESEE
CONTACT: Chris Webster, Vice President		ACTIVITY DATE: 04/17/2014
STAFF: Brian Culham	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: This was an announced inspection set up by Barry Selden, chief of the Water Resources Enforcement Unit. Stephanie Kammer of Water had been denied walk-in access by the company. A decision was made by the Department of Environmental Quality (DEQ) to include all divisions with compliance concerns in a single inspection to reduce the need for follow up inspections. Although a warrant was considered by the DEQ, B. Selden was able to convince the company to grant us entry as a group.		
RESOLVED COMPLAINTS:		

Chris Webster, Vice President - chriswebster@ameritech.net

This was an announced inspection set up by Barry Selden, chief of the Water Resources Enforcement Unit. Stephanie Kammer of Water had been denied walk-in access by the company. The company felt that their operations were too dangerous for unprepared entry. A decision was made by the Department of Environmental Quality (DEQ) to include all divisions with compliance concerns in a single inspection to reduce the need for follow up inspections. Air Quality Division (AQD) decided to be part of this process. Although a warrant was considered by the DEQ, B. Selden was able to convince the company to grant us entry as a group.

Michigan Steel Fabricators is located on Energy Drive just west of Universal Coating and just south of Genesee Power Station. The local governing body for this location is Genesee Township and not the City of Flint. A large residential population exists on the south side of Carpenter Rd., which is located at the south end of Energy Drive. The area to the west along Dort Hwy is a mix of commercial and industrial properties with some residential areas farther west. A mix of agriculture and residential properties, including a mobile home park are located north of Michigan Steel Fabricators. East is the Flint River, Bluebell Beach, Cross Roads Village, Penny Whistle Place, and other recreational areas.

The industrial park and the surrounding industrial areas around it are noted for having a history of environmental justice claims. Citizens in the area are generally in opposition to the installation of processes creating additional air emissions.

Michigan Steel Fabricators, Inc. creates welded metal products primarily used as industrial or residential architectural structures. Products include things like stairs, gates, railing, and doors. Substrates include various carbon steels, aluminum, and stainless steel. Processes are sawing, grinding, blasting, welding, cutting, and painting of the metal substrates.

This is the first inspection the AQD has completed at this source. According to Chris Webster operations began at this location in 1999. No Permit to Install has ever been issued for this location.

Michigan Steel Fabricators primary emits Particulate Matter (PM) from the metal fabrication and Volatile Organic Compounds (VOC) from the paint coating and cleanup solvents. Compliance with the Rule 287 exemption criteria of 200 gallon per month restricts the Potential to Emit (PTE) VOC to less than 10 tons per year making the source a "True Minor Source" of VOC. Because the metal fabrication processes are all considered exempt, the PTE for PM₁₀ will be below the threshold criteria making Michigan Steel Fabricators a "True Minor Source" of PM₁₀ as well. The major contributor of Hazardous Air Pollutants (HAPs) is the paint coating which will emit less than 10 tons per year making Michigan Steel Fabricators a "True Minor Source" of HAP and an "Area Source" of HAP.

Because Michigan Steel Fabricators is an "Area Source" of HAP they may be subject to 40 CFR 63 subpart XXXXXX, the National Emission Standard for Hazardous Air Pollutants (NESHA) for Nine Metal Fabrication and Finishing Area Source Categories. This subpart restricts emissions of certain hazardous metals such as chromium, which is contained in stainless steel, from certain metal fabricating sources. Fabricated Structural Metal Manufacturing and Miscellaneous Fabricated Metal Product Manufacturing are two of the categories subject to this subpart. NAICS and SIC codes are used to determine applicability to the category criteria. Michigan DEQ presently does not have administrative authority to enforce this subpart. The subpart requires that a company subject to this subpart mail an initial notification to the EPA.

4/22/2014

We arrived at 9:30 am as scheduled. The following DEQ staff were in attendance; Stephanie Kammer of the Water Resources Division (WRD), Bill Yocum of the Office of Waste Management and Radiological Protection (OWMRP), and myself representing the AQD. We met with Chris Webster, Vice President and owner of Michigan Steel Fabricators.

We explained our various responsibilities and what we would like to see at the source. It was decided that the Air Quality would interview C. Webster first and that we would limit the initial inspection to inside the plant. Following the initial in-plant inspection we would meet, I would debrief C. Webster, I would leave, and the remaining inspectors would inspect areas outside and to the creek.

No.	Emission Unit or Flexible Group	Description	Permit Number or Exemption	Comp. Status
1	Welders and Cutting Torches	Multiple welders including Inert Gas, Arc, and Oxy-Acetylene	Rule 285(i) Rule 285(j)	C
2	Machining	Cutting, sawing, grinding, blasting, turning, and drilling.	Rule 285(i)(vi)	C
3	Forming	Bending and forming.	Rule 284(i)(i)	C
4	Surface Coating	A paint booth with spray gun.	Rule 287(c)	C
5	Comfort Heating	Gas furnaces less than 50 million btu	Rule 282(b)	C

1. Welding and Cutting Torches

I identified several welders of differing styles scattered about the production area. Wire feed welders, arc welders, and oxy-acetylene torches were all identified. I would guess maybe 10 to 12 welders total.

2. Machining

I identified equipment used for cutting, sawing, grinding, blasting, turning, and drilling the various metal substrates. I identified metals that I thought were aluminum; stainless steel; and carbon steel. I did not see any hooding or ventilating systems exhausting to ambient air that were dedicated to serving any of this equipment. I did identify some equipment that had self-contained particulate control.

3. Forming

I saw at least two machines that's purpose was to bend metal into shapes.

4. Surface Coating

An area along the west wall was set up as a paint booth. C. Webster turned on the booth exhaust fan to demonstrate that it was functional. Panel type mat filters were in place over the exhaust ports. Some of the filters exhibited a gray coating, but did not appear to be over used. The discharge stack for the booth exits the side wall and is turned down aiming along the outside of the west wall. Some brownish discoloration was evident on the yellow wall, but was not excessive and may have occurred in the distant past. A red oxide prime had been used at one time.

The only coating in use now is the solvent based S.P. Kish High Solids Low Flash Patriot Grey Primer. C. Webster stated that they traditionally use about 20 gallons a month of this coating. He e-mailed me purchase records indicating a two month purchase of 50 gallons to support his claim. C. Webster has agreed to start recording coating use on an as applied basis. We discussed tracking both coating and thinner use. I explained that recordkeeping is a necessary condition of the 287 permit exemption. Records are necessary to verify that the monthly coating use is less than 200 gallons. If the records are not maintained, or if use exceeds 200 gallons, Michigan Steel Fabricators will be required to obtain an air use Permit to Install as required by Rule 201.

Xylene and/or Xylol are used for cleanup of the coating equipment. C. Webster stated that the spent cleanup solvent and paint mix is saved to be used as a thinner for the next paint job. There was no curing oven. Painted parts are allowed to air dry.

5. Comfort Heating

2 of 3
I noticed a heater suspended above the floor in the corner of the building. It appeared to be plumbed to a gas line. The unit was well below the 50 million BTU exemption criteria.

I left the facility at 11:00 am.

NAME

[Signature]

DATE

4-22-2014

SUPERVISOR

[Signature]

[M] [S] [F] MICHIGAN STEEL FABRICATORS, INC.

- INDUSTRIAL/COMMERCIAL FABRICATING
- SHEARING/FORMING/PUNCHING
- MISC. STRUCTURAL STEEL
- MOBILE CRANE RENTAL

CHRIS WEBSTER - Vice President, Owner

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