

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

P054226751

FACILITY: Port City Architectural Signage		SRN / ID: P0542
LOCATION: 2350 South Getty Street, MUSKEGON		DISTRICT: Grand Rapids
CITY: MUSKEGON		COUNTY: MUSKEGON
CONTACT: Timothy Mills, Owner/President		ACTIVITY DATE: 08/26/2014
STAFF: Eric Grinstern	COMPLIANCE STATUS: Compliance	SOURCE CLASS: Minor
SUBJECT: Unannounced Inspection		
RESOLVED COMPLAINTS:		

FACILITY DESCRIPTION

The facility's primary activity is the manufacturing of aluminum and bronze signs. Operations consist primarily of casting, finishing and coating. Currently the facility has an annual throughput of approximately three tons of aluminum and six tons of bronze.

REGULATORY OVERVIEW

The facility is a small foundry operation that would be classified as a minor source.

The facility is currently not subject to 40 CFR Part 63 Subpart ZZZZZZ, Aluminum, Copper, and other nonferrous foundries area source NESHAP. The facility is not subject because they do not melt metal above the applicability threshold of 600 tons per year.

The facility only melts spec alloy ingot for both the aluminum and bronze, as well as internal return. Therefore, the facility is not subject to any secondary metal processing NESHAPs.

COMPLIANCE EVALUATION

Prior to entering the facility a survey of the perimeter was made. No abnormal odors or opacity were noted.

At the facility staff met with Timothy Mills, Owner/President.

FOUNDRY

Mold Making

The facility's sand system consists of approximately 10,000 pounds of green sand that is manually prepped on the floor with a garden rototiller. The facility operates two small green sand mold presses that provide molds to one pour line. The facility has one small job that uses cores, which they purchase.

Melting

The facility has two furnaces, one with a 30 pound capacity and one with a 40 pound capacity. The facility does not use a reactive flux in the furnaces. They do use argon to degas the furnaces. The furnaces vent to the in-plant atmosphere. The furnaces are exempt from the requirement to obtain a permit to install under Rule 282(a)(iv).

Pouring/Cooling /Shakeout

Molds are manually poured and cooled in the same area the molds are produced. Molds are knocked out on the floor manually.

Finishing

After the signs are cast in the foundry, they are finished on a snag grinder and sander that have

baghouse control that vent to the in-plant atmosphere. Operations are exempt from the requirement to obtain a permit to install under Rule 285(l)(vi).

Coating

The facility has one booth for the application of coatings. At the time of the inspection the booth had particulate filters in place that were in good condition. Mr. Mills stated that they use 10-20 gallons a month of all coating components combined. The painting operations are exempt from the requirement to obtain a permit to install under Rule 287(c)(i).

MISCELLANEOUS

The facility plans to expand in the near future, which will include the installation of a mechanical sand mixer for use in making air set sand molds. The air set system would eventually replace green sand molds.

Conclusion

Due to the small size of the facility, emissions are currently small; however will increase with projected growth and the switch to an air set sand system.

Staff has directed the facility to submit a permit to install for the planned foundry modifications.

NAME



DATE

9/5/14

SUPERVISOR

