

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

N827237849

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| FACILITY: Bentek Incorporated | | SRN / ID: N8272 |
| LOCATION: 19 NORTH CHARLES, WHITE CLOUD | | DISTRICT: Grand Rapids |
| CITY: WHITE CLOUD | | COUNTY: NEWAYGO |
| CONTACT: Peter Strom , Foundry Operations Manager | | ACTIVITY DATE: 12/06/2016 |
| STAFF: Eric Grinstern | COMPLIANCE STATUS: Non Compliance | SOURCE CLASS: MINOR |
| SUBJECT: Unannounced inspection | | |
| RESOLVED COMPLAINTS: | | |

Unannounced inspection of Bentek Inc. Prior to entering the facility a survey of the perimeter was made. No odors were noted; however, what appeared to be particulate emissions were noted from the sand silo fill pipe.

At the facility staff met with Peter Strom, Foundry Operations Manager.

Facility Description

The facility is a foundry that primarily manufactures boat propellers. The facility employees approximately 12 workers and operates Monday through Friday, 04:00 - 17:30.

At the time of the last inspection the facility was not subject to any NESHAPs for foundry operations. They were below the 600 ton melt threshold for applicability to Subpart ZZZZZZ, and they did not melt any ferrous metals to be subject to Subpart ZZZZZ.

Regulatory Evaluation

Sand Handling

The facility has two mold machines/mixers, a 150 ton/min. machine and a 250 ton/min. machine. The mold machines vent back to the sand silo. All molds are manually rammed. The facility utilizes a sodium silicate binder system exclusively. No cores are used at the facility. Castings are manually knocked-off inside the facility, with the spent sand being loaded into a dump truck that hauls to a local quarry. The facility does not perform any sand recycling.

Inspection of the sand silo fill pipe that particulate emissions were observed from earlier showed no emissions. A small amount of particulate was observed on the ground around the fill pipe connection. EG requested that Mr. Strom evaluate the cause of the previously observed emissions. Mr. Strom followed up with an email on December 14, 2016, stating that they had determined that the particulate emissions resulted from the sand delivery driver failing to replace the cap on the pressurized sand silo fill pipe. Mr. Strom stated that the cap was replaced and the trucking firm re-instructed about the requirement to replace the cap.

Melting Operations

The facility has three furnaces, 1,000 pound capacity Nibral (Nickel, bronze, aluminum alloy) furnace, 500 pounds melting furnace, and a 900 pound aluminum melting furnace.

The 1,000 pound furnace, which is their primary furnace, is controlled by a small internal baghouse that vents through the roof of the building. This furnace is covered under PTI No. 119-11, which limits metal throughput to 600 tons per 12-month rolling time period and flux usage to 2,000 pounds per 12-month rolling time period. Records showed usage for the previous 12-months at 1,807 pounds. The facility provided metal melt records showing a throughput of 870.9 tons for the previous 12-months. This throughput exceeds the permit limit of 600 tons. Mr. Strom stated that some of the recorded metal through put was from the aluminum furnace, but not in the amount of the exceedance at 270 tons. Mr. Strom stated that they had a high production year in 2016.

The facility will be issued a VN for exceeding the metal throughput limit of 600 tons. The facility will also be required to comply with Subpart ZZZZZZ since they have exceeded the 600 tons per year threshold and because they process metal that contains nickel greater than the 0.1 percent by weight threshold. The NESHAP requires that a facility provide notification within 30 days of the end of the year that they

exceed the 600 tons applicability threshold and comply with the requirements within 2 years of the notification.

Finishing Operations

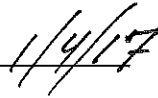
Finishing consists of a Panghorn shot blast that vents to a baghouse that has a mechanical precleaner. Additionally, finishing is performed with a cut-off saw and belt sander that vents to an internal baghouse control. The facility also has three Torit tables where hand belt sanders are used. The tables are equipped with filters that vents internally. All finishing processes are exempt from permitting under Rule 285(l)(vi).

Based on the information and observations made during this inspection, the facility appears to be in compliance with all applicable air quality rule and regulations with the exception of exceeding the melt throughput limit of 600 tons per 12-month rolling time period in PTI No. 119-11. A VN will be issued for this exceedance.

NAME



DATE



SUPERVISOR

