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

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| **FACILITY:** Wirtz Manufacturing Co Inc | | **SRN / ID:** N2926 |
| **LOCATION:** 1105 24th St, PORT HURON | | **DISTRICT:** Southeast Michigan |
| **CITY:** PORT HURON | | **COUNTY:** SAINT CLAIR |
| **CONTACT:** Ken Warshefski , HR Manager | | **ACTIVITY DATE:** 12/11/2014 |
| **STAFF:** Sebastian Kallumkal | **COMPLIANCE STATUS:** Compliance | **SOURCE CLASS:** |
| **SUBJECT:** Onsite facility Inspection including complaint investigation | | |
| **RESOLVED COMPLAINTS:** C-14-01168 | | |

**On Thursday, December 11, 2014, AQD Staff Sebastian Kallumkal conducted a self-initiated inspection at Wirtz Manufacturing Co., Inc. located at 1105 Twenty-Forth Street, Port Huron, Michigan. The purpose of the inspection was to verify facility's compliance with requirements of Article II, Air Pollution Control, Part 55 of Act 451 of 1994, with the requirements of the Permit to Install (PTI) No. 334-90 and to investigate Complaint No.: C-14-01168 related to allegedly horrible sulfur odors and continuous oil burning from the facility.**

**I arrived at the facility at about 1:30 PM. Wind= WNW;10.4 MPH (accuweather.com). I conducted odor observations along 24th Street, Chestnut Street, Howard Street and 25th Street. I did not observe any visible emissions from the facility or odor along these routes. Next I visited the complainant at his residence. I introduced myself and stated the purpose of my visit. He told me that he did not observe any visible emissions or foul odor on that day and for some time. These occurrences happen during summer. He pointed two long stacks to me and indicated that the visible emissions and oily odor emanates from those two stacks. I provided him my contact information and advised him to contact me directly when the incidents occur. He agreed to do so.**

**Next I visited the facility and met Mr. Ken Warshefski, HR Manager. I introduced myself and stated the purpose of my visit. Also provided him the MDEQ brochure regarding Environmental Inspections.**

**During the pre-inspection he explained to me about the processes at the facility. I informed him about the complaint regarding smoke and oil/sulfur odor from the facility. He told me that the stacks belong to the ConCast (Continuous Casting) ovens (EUCASTER-D and EUCASTER-E). EU-CASTER-F has not been installed. He wasn't sure about the sulfur odor. He told me that the oily smell is possible because of the oil based release agent they use in the casting. The CONCASTs are operated 5 days per week.**

**He told me that the equipment for PTI No. 41-14 at 2935 Howard Street (SRN N2227) has not been installed. This permit includes casting machines, pasting machine, assembly of machines, etc.**

**The facility is involved in the testing and certifying of molds by making continuous casting (wheel) or flat plates. These molds are used for making plates for the acid batteries. The process includes melting lead alloy in enclosed, electrically heated melt pot at temperature less than 800°F. After a new mold is installed, it is sprayed with a release agent. The lead is pumped to a dispensing ladle where the metal is prevented from a oxidizing by a small, natural gas flame. When the metal is frozen, the mold opens and discharges the cast grid into a conveyor to a trim die. The trim die removes the flash and it is deposited onto a recycle conveyor and returned to the melt pot. The cast grid is then checked for dimensional accuracy and weight. Approximately 6 grids are shipped to the customer as part of the mold certification process. The rest of the grids are either re-melted or sold to a secondary lead recycler. Industrial grid casting is identical, except for the grid weighs between 200-900 grams.**

**The facility has 2 rotary (continuous) casters and 2 flat (Grid) type casters. EUCASTER-C has not been installed.**

**The facility also manufactures machinery to make battery cell plates for lead acid batteries. This machinery includes molds for the battery cell plates, casting machines, and electrically heated lead melting furnaces. These furnaces are used to melt lead alloy to make the cell battery plates and to recycle the off spec battery plates.**

**He also informed me that the facility is not performing pasting operations (EUPASTING) and EVOVEN. Facility has not performed this operation for about 10 years. He explained to me that they are not operating the lead oxide mixing bowl, paste mixer, rotary cutter or plate stacker. He informed me that they are using less than 100 tons lead alloy in the plant and is keeping log of the lead alloy usage. The facility has 120 employees, operates 9 hours per day and 5-51/2 days per week.**

**After the pr-inspection meeting, he accompanied me for an inspection of the facility. I inspected the casting machines, the machining area and the paint booths. The facility operates two single plate casting machines and two continuous casting machines. Each machine also has attached electrically heated lead melting furnace. The single plate casting machine is operated 4-5 hours/day and melts about 40-50 pounds per day. The used lead is send back to lead smelter for recycling. The continuous casting machine is operated one day per week for about two hours. The exhaust from all these furnace and casting machines are vented uncontrolled to the outer atmosphere.**

**It also has six machining operations (2 lathes, 3 milling, 1 CNC lathe) and four machining centers. The machining process in the machining center is cooled using water based coolants. The coolant mist is filtered and the exhaust is vented into the plant atmosphere. The facility also has one electrical discharge machine to burn away the steel and to smooth the edges. The facility also has cutting and welding operations for the metal sheets.**

**The facility has two paint booths. He informed me that they are keeping coating usage data and booths are exempt under Rule 287(c). I informed him that the booth filters should be in place and replaced as necessary. Based on the usage records the facility used less than 400 gallons per month for both booths. Facility keeps combined records for both booths. Facility needs to keep separate records for each booth to verify that each booths use less 200 gallons per month, required per Rule 287(c) which exempts a coating booth from obtaining a permit to install.**

**The facility also has a parts washer. The lid was kept closed at the time of my inspection. I provided him the operating procedures pursuant Rule 707(4).**

**PTI No. 99-07A**

**EUPASTING - Not in operation.**

**EUOVEN-Not in operation**

**FGCASTERS: Includes EUCASTER-A EUCASTER-B, EUCASTER-C, EUCASTER-D, EUCASTER-E, EUCASTER-F**

**EUCASTER-C and EUCASTER-F are not installed.**

**SC II.1 & II.2- Limits the processing of casting alloys through FGCASTERS, per year, based on a 12-month rolling period to 500 tons. Facility keeps records on a monthly basis. Based on the records 12-month rolling time period alloys usage is 20755 pounds as of November 2014. This is in compliance with the requirement.**

**SC VIII-1 limits the stack dimensions. The stack dimensions were not verified, but appear to be compliance.**

**Conclusion: During the complaint investigation, the odor was not verified. More investigations would be conducted while in the area or after future complaints. The facility appears to be in compliance with applicable air quality regulations. Facility needs to keep materials usage records for each booth separately on a monthly basis.**

NAME Sebastian Kallumkal DATE 12/26/2014 SUPERVISOR CTE