

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

P122963842

FACILITY: West Michigan Stripping		SRN / ID: P1229
LOCATION: 3237 Union Avenue SE, WYOMING		DISTRICT: Grand Rapids
CITY: WYOMING		COUNTY: KENT
CONTACT: Hithanu Parnell, Owner		ACTIVITY DATE: 07/21/2022
STAFF: April Lazzaro	COMPLIANCE STATUS: Compliance	SOURCE CLASS: Minor
SUBJECT: Unannounced, scheduled inspection.		
RESOLVED COMPLAINTS:		

Staff, April Lazzaro arrived at the facility to conduct an unannounced, scheduled inspection. Upon arrival, no smoke or odors were observed, the permitted burn off oven was not operating.

FACILITY DESCRIPTION

West Michigan Stripping has one burn off oven which operates pursuant to Permit to Install No. 65-22. The unit is a batch type natural gas fired burn off oven with a 0.218 mmBTU primary chamber for removing cured paints and coatings from metal parts by thermal decomposition in a primary chamber. Emissions generated by the burn off oven are controlled by a 0.237 mmBTU secondary chamber afterburner.

COMPLIANCE EVALUATION

I called the owner, Hithanue Parnell upon my arrival, who met me at the facility. We walked through the facility, and I confirmed that the only process regulated by the Air Quality Division is the burn off oven. I observed the strip chart on the wall, and Mr. Parnell showed me all strip charts which are maintained in the shop office. (see attached) Currently, they keep track of the weight of materials burned off by weighing the rack before and after an oven cycle. Then, the difference is logged into a record retained on a cell phone, and into an Excel spreadsheet. Mr. Parnell does not leave the oven unattended, and someone is always there during a burn. In addition, a camera has been installed that points at the main chamber digital display so that it can be monitored if he is in his office in a different part of the building, or an employee is present overseeing the burn and he is offsite.

The strip charts show a typical afterburner temperature curve expected of burn off ovens. As described by Mr. Parnell when the unit is turned on, the afterburner comes on first, and when it reaches a setpoint temperature of 1,500°F, the oven main chamber burner lights. The oven main chamber temperature operates at a setpoint of 800°F. The burn off oven typically operates once a day for 2-3 hours per batch. The afterburner consistently stays above 1,400°F for the duration of the batch length as required. Currently one strip chart each week is used, and the week date is written on the chart. However, the date of each burn is not present, and should be noted on the chart. The facility needs to better document the batch date on the strip chart going forward. This should be consistently done in the same manner for each batch.

Recordkeeping at the time of the inspection consisted of batch weight records but did not include emissions calculations to demonstrate compliance with the Hydrogen Chloride (HCl) emission limit. Mr. Parnell worked quickly with Jenifer Dixon of the

Environmental Support Division to rectify this, and updated records were provided in a timely manner.

The records in Excel include the batch weight before and after processing, the weight difference and an emission factor that calculates the daily amount of HCl emitted. The records also include a monthly and 12-month rolling tab which calculates those values. There is not enough data for a 12-month rolling total emission at this time since the unit is new. However, at the current emission rate of 0.02 tons per month, at this production level emissions are expected to be below the 12-month rolling limit of 5.8 tons per year. Records must be maintained, and data entered into the spreadsheet on a monthly basis in order for the facility to be considered compliant in the future.

A few housekeeping issues were pointed out to Mr. Parnell during the inspection, including tips for proper handling and disposal of the ash generated in the oven, as well as the ash that is removed from the parts before they go back to the customer.

The main chamber burner housing was damaged at the time of the inspection, and Mr. Parnell had someone coming out to replace it that day. Photos of the repaired burner housing were emailed to me and are attached.

Mr. Parnell hopes to get another burn off oven in the future. A new Permit to Install must be received prior to the installation of a new burn off oven.

CONCLUSION

West Michigan Stripping was in compliance at the time of the inspection.

NAME April Lazzaro

DATE 08/03/2022

SUPERVISOR 