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

M406725018

FACILITY: DEDOES INDUSTRIES		**SRN / ID:** M4067
LOCATION: 1060 W MAPLE RD, WALLED LAKE		**DISTRICT:** Southeast Michigan
CITY: WALLED LAKE		**COUNTY:** OAKLAND
CONTACT: Ed Moreno , Maint. Supervisor		**ACTIVITY DATE:** 04/28/2014
STAFF: Francis Lim	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Self initiated inspection		
RESOLVED COMPLAINTS:		

On April 28, 2014, I conducted a self-initiated compliance inspection at Dedoes Industries, Inc ('Dedoes") located at 1060 W. West Maple Rd, Walled Lake, Michigan. The purpose of the inspection was to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) Administrative Rules; Permit-to-Install (PTI) No. 121-13; and to observe a stack test for a newly installed burnoff oven. Mr. Ed Moreno, facilities manager assisted during the inspection.

Dedoes is a manufacturer of industrial metal cabinets and paint mixing equipment for the refinish industry. Facility operates one shift, 4 10-hour days.

Metal fabrication is conducted on-site using hydraulic bending and cutting equipment. Metal used for fabrication are steel sheets and precut metal sheets. Facility operates 4 small plastic injection molding machines using nylon and other plastic materials. The plastic injection molding machines are seldom used as most of the plastic parts now come from China.

A powder coating line is used to paint their products. Predominant color used is white or black, and sometimes blue. Powder overspray that accumulates on the booth floor is collected and reused. The metal products are coated by robots but finished off manually to reach inside corners. A liquid paint booth was removed in 1991. The overspray that adheres on the parts racks are removed in a burnoff oven. The overspray that accumulates on the racks cannot exceed a certain thickness, otherwise a good ground cannot be achieved in the electrostatic painting process.

The metal parts are washed in an alkaline hot water washer and then sealed prior to coating. The coated parts are cured in a dry off oven.

The powder coating booth was covered by PTI No. 160-91. This permit was voided in 2013. The powder coating booth is exempt under Rule 287(d).

Ptl No. 121-13 is for the burnoff oven used to remove the overspray form the paint racks. The burnoff oven has a hydrogen chloride (HCl) limit of 26.7 pounds/hr and 400 batches of parts processed in the burnoff oven. A stack test was required to verify that HCl limit is not exceeded. Facility processes a maximum of 4 batches per week in the burn off oven.

On the day of the stack test, the burnoff oven was started at 8:45 AM. Prior to pushing the start botton, racks are placed inside the oven. When the start button is pushed, a 4-minute purge cycle is started. Water sprays come on for 15 secs to visually verify that the sprays are working. When the burnoff doors are closed, the afterburner starts and ramps up and

reaches 1500 F within minutes. When the afterburner reaches 1500 F, the primary burner starts and takes about 30 - 45 minutes to reach 800 F, at which time a timer, set to 1.5 hours start. When a flame from the racks being processed is detected, the water sprays come on to douse the flame and the timer is stopped. After approximately 1.5 hours when the timer times out, the afterburner and primary burner turns off. A typical burn cycle lasts approximately 3.5 hours until afterburner and primary burner stops. The clean parts are removed the next morning prior to reloading the oven. During the stack test, racks coated with black and white powder coat was processed.

The first-hour run was started at 8:50 AM. During this time, the primary burner was ramping up. The second-hour run was started at 10:04 AM. A system leak check was conducted after the first run. The primary burner reached 800 F at approximately 10:35 AM. The timer then started the countdown to 1.5 hours. The third-hour run started at 11:16 AM. A system leak check was conducted after the second-hour run. After the timer timed out at approximately 12:05 PM, the primary buner and secondary burner stopped. Third-hour run ended at 12:16 PM.

Staff did not see any visible emissions during the operation of the burn off oven and after the afterburner and primary burner ceased operations.

NAME S. Lutz DATE 05-05-14 SUPERVISOR CTE