FY2018 Sched Insp

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

N246043864

FACILITY: EQUIPMENT ASSETS		SRN / ID: N2460
LOCATION: 835 STEPHENSON HWY, TROY		DISTRICT: Southeast Michigan
CITY: TROY		COUNTY: OAKLAND
CONTACT: Tony Hewines ,		ACTIVITY DATE: 03/20/2018
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: FY 2017 Scheduled Inspection of Maple Machinery DBA Equipment Assets ("Equipment")		
RESOLVED COMPLAINTS:		

Maple Machinery DBA Equipment Assets (N2460)
835 Stephenson Hwy.
Troy, Michigan 48083-1142

Phone: 248-399-7900; Fax: 248-399-7960

Complaint: C-14-00359

GPTI No. 167-13 dated November 25, 2013, for a natural gas fired burn-off oven.

Name change: E. I. Du Pont De Nemours & Company (N2460) ➔ Maple Machinery DBA Equipment Assets, Inc. (N2460). About 2010, Maple Machinery bought the Du Pont's building.

Du Pont conducted research and development activities in four different buildings as follows:

1. **B6414, Coating Finishes R&D Lab, 945 Stephenson Hwy., Troy. About June 2006, all operations at this building were ceased. According Ms. Pointer and Mr. Woods, the building was sold, and the new owners demolished it. Per my FY2009 inspection, there was a flat ground. PTI Nos. 157-03 (7/9/2008), 768-91 (7/9/2008), 1067-90 (7/9/2008), 155-90 (9/7/1995), 407-88 (9/7/1995), 571-82 (7/9/2008) were voided. The August 29, 12006 letter from Michael J. Vecellio, Laboratory Manager, requested to void PTI Nos.: 786-87.**

2. **N2460, Automotive Application R&D facility, 835 Stephenson Hwy., Troy. Assembly plant size coating application facilities were present for trouble-shooting, testing and R & D. Per Ms. Pointer, the facility was placed into "sleep mode" in May 2005. Per my FY2009 inspection and as stated by Mr. Wood, the facility was removed from "sleep mode" in November 2008. All process equipment including stacks from the building were removed. However, while Boiler No. 2 of design capacity 15 million BTU per hour heat input was inherited by Equipment Assets, Boiler No. 1 of design capacity 15 million BTU per hour heat input was removed about 2009. In addition, about 2014, Equipment removed Boiler No. 2 as well. As the identical boilers were installed in 1986 (< 1989), the active boiler was not subject to NSPS Dc. Most operations were moved to Mount Clemens facility. PTI No. 446-86 (7/9/2008) was voided. The August 29, 12006 letter**

from Michael J. Vecellio, Laboratory Manager, requested to void PTI Nos.: 572-89, 157-03 (7/9/2008).

3. **N1726, Refinish Training Center, 865 Stephenson Hwy., Troy. About June 2009, all process equipment were moved to Mount Clemens except the training booth, which was dismantled.**

4. **N2995, Engineering Materials Processing Lab, 1150 Allen Drive, Troy. All operations ceased by July 2009. The August 29, 2006, letter from Michael J. Vecellio, Laboratory Manager, requested to void PTI Nos.: 571-82.**

On March 20, 2018, I conducted a level-2 **FY 2017 Scheduled Inspection** of Maple Machinery DBA Equipment Assets ("Equipment") located at 835 Stephenson Hwy., Troy, Michigan 48083-1142. The inspection was conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451; Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) administrative rules; and GPTI No. 167-13.

During the inspection, Mr. James McCallum (Phone: 248-399-7900; Fax: 248-399-7960; Cell: 248-778-5955; E-mail: JM@Equipment-Assets.com), Operating Manager, and Mr. Troy R. Hewines (Phone: 248-399-7900; Fax: 248-399-7960; Cell: 248-635-0559; E-mail: ARH@Equipment-Assets.com), VP, assisted me.

Equipment Assets purchases battery powered (electric) lift trucks as scrap from the industry and principally recovers copper from them. Propane powered lift-trucks are not processed. Equipment Assets strips the lift trucks for parts and salvages saleable parts. Equipment Assets sells parts / components such as motors, control panels, hydraulic oil to the highest bidders. Limited maintenance torching (propane) is done to unfasten bolts and nuts, which are stuck and cannot be removed by conventional tools, to recover motors, parts, etc. To recover saleable steel scrap stripped bodies are sent to outside torching companies such as R. J. Torching of Flint.

Torch cutting

Limited maintenance torch (propane) cutting is done to unfasten bolts and nuts (only if they are stuck) to recover motors, parts, etc. To recover saleable steel scrap stripped bodies are sent to outside torching companies such as R. J. Torching of Flint. Such maintenance bolts torch cutting takes place about once per week. There is no exhaust outside ambient air. The maintenance bolts torch cutting is exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(2)(j)

Torit Downflow dust collector (two 30-HP blower motors, 24,000 cfm air flow, 48 cartridges) has been removed as metal recovery business ceased about 2015.

Burn-off oven (GPTI No. 167-13)

One 8 ft. x 8 ft. * 8 ft. burn-off oven is present (GPTI No. 167-13). It is natural gas fired automatic burn-off oven system; i.e., one push-button will turn on primary combustion chamber (800 °F) secondary combustion chamber (1600 °F) that acts as an after-burner to oxidize fumes from the primary chamber. GPTI No. 167-13, SC IV.1 requires minimum

temperature of 1400°F and a minimum retention time of 0.5 seconds for the afterburner. The burn-off oven is made by Jackson Oven Supply of Jackson. The burn-off oven burns insulation, grease, paint from the motors to facilitate copper stripping; the stripped copper is valuable product. This is a batch process where a basket of motors is burnt for copper recovery. About 50 motors per month are processed.

Propane powered RICE lift trucks are not processed as scrap at this facility because they do not contain copper.

If the after-burner is operated properly at about 1600 °F prior to burning off motors in the oven, the oven is not expected to cause odors.

GPTI No. 167-13 compliance

Only natural gas is fired in both primary and secondary chambers (GPTI No. 167-13, EU-BURNOFF, II.1). Only paints, oil, glue, grease are present on battery-powered electric motors (GPTI No. 167-13, EU-BURNOFF, II.2, III, 1&2). While primary burner maintains temperature at 800 °F, secondary burner maintains temperature at 800 °F (GPTI No. 167-13, EU-BURNOFF, IV.1 T > 1400 °F).

Jackson Oven performs biannual maintenance (GPTI No. 167-13, EU-BURNOFF, IV.4).

The 8-hour batch oven is used twice per week. I asked Equipment Asset to keep temperature records on a log sheet for each burn-off batch (GPTI No. 167-13, EU-BURNOFF, VI, 1&3). Automatic temperature control and interlock systems are present (GPTI No. 167-13, EU-BURNOFF, IV.3 & VI, 6).

About 50 motors are processed (burn-off mostly glue) per month resulting in 10 pounds of copper recovery.

About 11:00 am, March 20, 2018, I noticed, as oven cooled down, 1500 °F and 700 ° F secondary and primary temperature readings, respectively.

I asked Mr. James McCallum to keep of a log of operating temperatures. See below.

Boiler

About 2014, 15 million BTU per hour boiler that Du Pont used for space heating is now removed and the space is used as a room.

Sanding booth

One sanding booth (10 feet L* 10 feet W *10 feet H) is present. The dust is controlled by one Dust-Hog and filtered air is released to in-plant environment. Some panels are manually brush painted using this booth (2 gallons of paint per month usage).

Potential hazardous waste

Equipment Assets handles battery acids and lead from the waste batteries of fork-lift trucks. AQD referred these potentially hazardous waste handling activities (Hazardous Waste Management, Liquid Industrial Wastes, RCRA, etc.) to Mr. Mark Daniels of MDEQ-OWMRP (Office of Waste Management and Radiological Protection).

Conclusion:

Equipment Assets needs keep burn-off oven records. Temperature records to be verified during next inspection.

E-mail to JM@Equipment-Assets.com & ARH@Equipment-Assets.com (Thu 3/29/2018 11:39 AM) regarding LOGS for batch burn-off oven.

LOGS for batch burn-off oven

Equipment Assets (N2460) - Monthly records for burn-off oven					
Month: e.g. Jan 2018 (complete one log sheet per month)					
Date of biannual maintenance by Jackson Oven:					
Automatic temperature control system condition:					
Thermocouples calibration:					
Interlock system (ensures minimum temperatures) condition:					
Note: Keep maintenance records and invoices					
Batch date	Begin & end times	Hourly primary chamber temperatures and batch average	Hourly secondary chamber temperatures and batch average	Tech / operator name	Signature

Reply e-mail from James McCallum jm@EQUIPMENT-ASSETS.COM Thu 3/29/2018 1:44 PM.

Iranna,

Thank you for this. We are now using this log to record data from our batch burn off oven.

Kind regards,

James McCallum
Tel 1.248.399.7900 **Cell** 1.248.778.5955 **Email** jm@equipment-assets.com

NAME J McCallum DATE 03/29/2018 SUPERVISOR