

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

N008130431

FACILITY: Paint Work Inc		SRN / ID: N0081
LOCATION: 2088 Riggs Ave, WARREN		DISTRICT: Southeast Michigan
CITY: WARREN		COUNTY: MACOMB
CONTACT: Elizabeth Weld-Haddow , President		ACTIVITY DATE: 04/14/2015
STAFF: Rebecca Loftus	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT:		
RESOLVED COMPLAINTS:		

On April 14, 2015, I, Rebecca Loftus, Air Quality Division (AQD) inspector, conducted an unannounced inspection of Paint Work Inc. (N0081), located at 2088 Riggs Road, in Warren, Michigan. The purpose of this inspection was to determine the facility's compliance with the Federal Clean Air Act, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act of 1994, PA 451, as amended, Michigan's Air Pollution Control Rules, Permit to Install (PTI) No. 124-01, the Halogenated Solvent Cleaner NESHAP, and Consent Order No. 35-2001.

I arrived at Paint Work Inc. at 10:00am and met with Mr. Mark Shamblin and Ms. Elisabeth Weld-Haddow.

Facility Contact Information

Elisabeth Weld-Haddow, President/Manager
586-759-6640
paintwork@comcast.net

Facility Overview

Paint Work Inc. conducts miscellaneous metal (mainly steel and aluminum) coatings primarily for military contracts. Operating hours are between 7:00am and 3:30pm, Monday through Friday.

At this facility, Paint Work Inc. operates two manual spray coating lines (EU_Line-01 & EU_Line-02) which include a total of three paint booths, a series of four metal surface prep tanks, and a halogenated solvent vapor degreaser tank.

The coating lines are permitted under PTI No. 124-01 which contains enforceable restrictions on volatile organic compound (VOC) and Hazardous Air Pollutant (HAP) emissions to opt the facility out of the Title V Renewable Operating Permit (ROP) program. The degreaser tank is subject to 40 CFR 63 Subpart T, the Halogenated Solvent Cleaning NESHAP, because the facility uses Trichloroethylene (TCE) as solvent.

EU_Line-01 and EU_Line-02

EU_Line-01 includes parts that are painted in "Booth 1" (which is actually 2 booths side by side) and the conveyor line that goes through heat lamps as part of the drying process.

EU_Line-02 ("Booth 3") is located in an adjacent section of the building. Previously, this booth was used to manually paint larger parts which were then transferred into a natural gas fired oven for drying. The motor on the oven is broken and the oven is no longer in use. Booth 3 was unused in 2014/2015 and the room is currently be used as storage.

During my inspection, parts were being manually painted in Booth 1 using a white paint. The painter was using a Binks 2001 HVLP paint gun and explained that the filters are changed out daily after painting. Mr. Shamblin provided me with a sample of the White Paint and the Catalyst. These samples were sent to the AQD lab with instructions to mix at a 1:1 ratio (see below and attached documents for the lab results).

On April 20, 2014, AToM provided me with the results of the Method 24 analysis conducted on the paint sample (see attached). The mixture, at a 1:1 ratio, contained 4.20 lbs/gallon VOC. This is very similar to the combined VOC contents found on the Material Safety Data Sheets and the records provided by IAC.

Record Keeping (SC No. 3, 4, 8, 9, 23, 24)

Paint Work Inc. maintains the following records on-site: daily coating usage, VOC contents of each material, monthly summaries of VOC emission rates in lb/month, and annual summaries of VOC emission rates calculated at the end of each month, based on rolling 12 month time period. Paint Work Inc. also maintains usage records of TCE and other HAP containing materials. Ms. Weld-Haddow provided copies of these records via email on April 14-15, 2015 (see attached cd for data).

Emission Limits (SC No 1, 2, 6, 7, & 11)

The combined monthly VOC emission rate for all VOC containing materials was below the permit limit of 2000 lb/month. The highest combined monthly VOC emission rate for 2013 occurred in January at 712.6 lbs and for 2014 occurred in April at 516 lbs. The highest 12 month rolling VOC emission rate occurred in January 2014 at 1.77 tons; less than the 10 ton permit limit.

The facility is keeping daily summaries of combined VOC emission rates under FG_Lines. For 2014, the highest daily VOC emission rates for each month are less than the 126.7 lb/day permit limit.

<u>Date</u>	<u>Highest Daily VOC (lbs)</u>
1/30/14	43.65
2/19/14	40.99
3/11/14	36.67
4/25/14	40.28
5/21/14	44.81
6/18/14	54.08
7/24/14	51.05
8/05/14	51.20
9/11/14	38.06
10/29/14	33.61
11/24/14	38.00
12/23/14	39.15

The combined aggregate HAP emissions as of December 2014 were 3.46 tons; which is less than the permit limit of 22.5 tons per year. TCE had the highest individual HAP emissions for the facility at 2.86 tons; which is less than the permit limit of 9 tons per year.

Although the data was available, I created an excel sheet to assist Paint Work Inc. in tracking the 12-month rolling HAP emissions (see attached calculations). The excel file will be emailed to Ms. Weld-Haddow for her to use in the future.

2014 MAERS

For 2014, Paint Work Inc. reported approximately 5.68 tons of source-wide VOC emissions; this included 5679.6 lbs of TCE emissions. The emissions reported to MAERS for 2014 is consistent with the daily/monthly records provided at the time of my inspection.

40 CFR Part 63 Subpart T, Halogenated Solvent Cleaning NESHAP

For the degreaser, Mr. Shamblin stated that he conducts daily inspections on the cover, the seals, and other mechanical parts for potential leaks and to make sure employees are using the degreaser properly and keeping the cover closed (see the attached copies of his inspection logs). The maximum temperature is established by the design of the degreaser at 180°F. For 2013 and 2014, the monthly idling emission rates were below 0.045lbs/hr/sq ft (see attached records). During the inspection, the degreaser appeared to be operating properly and appeared to have the correct freeboard ratio.

Additional Federal Regulations

Paint Work Inc. may also be subject to 40 CFR, Part 63, Subpart HHHHHH, the National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources. I provided Mr. Shamblin with a copy of DEQ's Clean Air Assistance Subpart HHHHHH guidance postcard during my inspection. The State of Michigan does not currently have delegation of this Rule, therefore, compliance with Subpart HHHHHH was not determined during the AQD inspection.

Consent Order No. 35-2001

Ms. Wald-Haddow provided a copy of the Notice of Termination Letter dated July 12, 2010. The letter is now in the AQD file and the Consent Order File has been marked voided.

Conclusion

Based on the information gathered during the inspection, at this time, Paint Work Inc. appears to be in compliance with the Federal Clean Air Act, Michigan's Air Pollution Control Rules, PTI No. 124-01, and the Halogenated Solvent Cleaner NESHAP. Note that Consent Order No. 35-2001 is no longer active.

NAME Rebecca Jettis

DATE 4/29/15

SUPERVISOR CJE