

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

N150730880

FACILITY: TOTAL DOOR		SRN / ID: N1507
LOCATION: 6145 DELFIELD DR, WATERFORD		DISTRICT: Southeast Michigan
CITY: WATERFORD		COUNTY: OAKLAND
CONTACT: Patricia Yulkowski, CEO		ACTIVITY DATE: 08/13/2015
STAFF: Rebecca Loftus	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT:		
RESOLVED COMPLAINTS:		

On August 13, 2015, I, Rebecca Loftus, from the Department of Environmental Quality's (DEQ) Air Quality Division (AQD), conducted an inspection of Total Door, SRN: N1507, located at 6145 Delfield, Waterford, 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, and Permit to Install (PTI) No. 15-09A.

Upon arriving at the facility, I met with Ms. Patricia Yulkowski, CEO, and Mr. Tim Spencer, Plant Manager.

Facility Overview

Total Door has been in business for more than 40 years and manufactures metal and wooden door systems for a wide variety of industries. Previously, Total Door was located in Pontiac. In 2009, Total Door applied for a PTI for a new Waterford location. PTI No. 15-09A was issued to Total Door for the operation of three surface coating lines, labeled in the permit as: EU-ELECTRO, EU-HANDHLD, and EU-ROLL. Note: The naming conventions are from the old facility layout and staff do not use the same nomenclature. I have updated the attached facility layout to show what each emission unit consist of.

Mr. Spencer escorted me through the building and explained that, at this facility Total Door fabricates, primes, coats, and customizes metal and wood doors. We started at the beginning of the process, near the receiving dock where sheet metal and foam interiors are stored. For metal doors sheet metal comes in dry and clean so no solvents are needed for initial cleaning. The sheet metal is fit and customized to client specifications in the forming/bending line area using a turret punch system.

The formed metal is then sent to the roll coating line (EU-ROLL). Mr. Nothdurft explained that the foam interior is covered on both sides with an adhesive in a temperature controlled enclosure. Then, like a sandwich, the two pieces of sheet metal are compressed together on the foam using a clamp press.

From the roll coating area, the doors are taken to the door body assembly area where hand welders and cutting tools are used to complete the door specifications. The doors are then hung on racks and are taken by an automated conveyor system to the painting area.

Near the door racks is a roll forming area used for door rails, tracks, hinges and other components. This equipment uses a coolant and produces waste water which is picked up by Polar Environmental for disposal.

The painting area contains a paint mixing area, a UV primer booth, electrostatic applicators paint booths (EU-ELECTRO), hand held HVLP applicator booths (EU-HANDHLD), and curing ovens. After being primed, the automated conveyor system take the doors through the handheld booths to be painted (one booth for each side of the door), and lastly takes the doors through the curing ovens. After the painting process is complete, the remaining door components are assembled and the doors are then ready to be shipped.

PTI No. 15-09A

PTI No. 15-09A has conditions for three emission units: EU-ELECTRO, EU-HANDHLD, and EU-ROLL, and two flexible groups: FG-FACILY, FG-COATING.

EU-ELECTRO

The conditions for the automated electrostatic lines require filters to be properly installed and maintained. During my inspection, the lines were not in use, but I noted that filters where installed. Mr. Spencer stated that the filters are changed on a regular basis.

The emission limits established for EU-ELECTRO are 2,000 lbs VOC/month and 10.0 tons VOC/year (12month rolling). Based on recording keeping, Total Door calculated the following VOC emissions for EU-ELECTRO:

Year	Highest Monthly Emissions (lbs.)	Total Emissions (lbs.)
2013	July – 942.34	7722.34
2014	July – 1669.27	8776.04

EU-HANDHLD

The conditions for the hand held applicator spray booths require filters to be properly installed and maintained and applicators to be HVLP guns or have an equivalent transfer efficiency. During the inspection, the booths were in use. Only a small amount of paint is mixed at a time, so I did not collect a paint sample. Mr. Spencer explained that a new filter is put into place daily. The filters appeared to be properly installed.

The emission limits established for EU-HANDHLD are 2,000 lbs VOC/month and 10.0 tons VOC/year (12month rolling). Based on recording keeping, Total Door calculated the following VOC emissions for EU-HANDHLD:

Year	Highest Monthly Emissions (lbs.)	Total Emissions (lbs.)
2013	August - 99.87	760.13
2014	August - 129.11	957.80

EU-ROLL

The roll coat line was not in use during my inspection. The emission limits established for EU-HANDHLD are 2,000 lbs VOC/month and 10.0 tons VOC/year (12month rolling). Based on recording keeping, Total Door calculated the following VOC emissions for EU-HANDHLD:

Year	Total Emissions (lbs.)
2013	1.86
2014	2.17

FG-COATING

FG-COATING has a VOC limit of 30.0 Tons/year for all coating operations including facility-wide cleanup and purge activates. FG-COATING also establishes limits for Xylene at 56.54lb/day and P-Chlorebenzotrifloride at 39.57lbs/day.

Based on the records provided, Total Door recorded facility-wide emissions of 4.24 Tons VOC in 2013 and 4.87 Tons VOC in 2014. Based on the daily records (see attached CD), Total Door appears to be in compliance with the daily limits for Xylene and P-Chlorebenzotrifloride.

FG-COATING also has conditions which address compliance with Federal Air Quality Regulations, specifically the provisions of the National Emission Standards for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, Title 40 of the CFR, Part 63, Subpart HHHHHH (NESHAP 6H).

Currently, the AQD does not have delegated authority for Area Source NESHAPs, including NESHAP 6H; Therefore, compliance with NESHAP 6H was not evaluated.

FG-FACILITY

FG-FACILITY establishes HAP limits for all process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment. Individual HAPS must be less than 9 Tons/year and the aggregate HAPs are less than 22.5 Tons/year.

Xylene, n-Butyl Acetate, and Formaldehyde had the highest emissions in 2013 and 2014; emissions are listed as 12-month rolling totals. See attached CD for data; below is a summary of Total Door's yearly HAP emissions.

Year	Total HAP Emissions (Tons)
2013	4.4068
2014	4.8902

Other Air Quality Regulations/Concerns

The forming/bending and cutting tools appear to be exempt from obtaining a permit to install pursuant to Rule 285(l)(i) and Rule 285(l)(vi). The hand welders appear to be exempt from obtaining a permit to install pursuant to Rule 285(i).

During my inspection, I noted a lot of 55 gallon drums of MEK. Mr. Spencer explained staff are using MEK to wipe down doors just before painting. Mr. Yulkowski was unaware of this practice and believed staff were using acetone. While MEK has been de-listed as a HAP, Ms. Yulkowski stated she would make sure the records are updated to reflect the appropriate VOC emissions for the surface coating lines in EU-ELECTRO.

MAERS

Total Door Reported the following emissions to Michigan's Air Emissions Reporting System:

Year	Total VOC Emissions (lbs)
2013	8483.99
2014	9735.97

The reported emissions are very similar to the records provided. Differences appear to be due to rounding.

Conclusion

Based on information gathered, at this time, Total Door appears to be in compliance with the Federal Clean Air, Michigan's Air Pollution Control Rules, and the conditions established in PTI No. 15-09A.

NAME Rebecca J. [Signature]

DATE 8/25/15

SUPERVISOR CJE