

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

N150745873

FACILITY: TOTAL DOOR		SRN / ID: N1507
LOCATION: 6145 DELFIELD DR, WATERFORD		DISTRICT: Southeast Michigan
CITY: WATERFORD		COUNTY: OAKLAND
CONTACT: Patricia Yulkowski, CEO		ACTIVITY DATE: 06/01/2018
STAFF: Rem Pinga	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Unannounced Level 2 Target Inspection		
RESOLVED COMPLAINTS:		

On June 1, 2018, I conducted an unannounced level 2 target inspection at Total Door Systems, LLC, SRN: N1507, located at 6145 Delfield, Waterford, Michigan 48329. 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. During the pre-inspection meeting, I met with Ms. Patricia Yulkowski, President and CEO, and Ms. Jeanne Kitchen, Chief Operating Officer (COO). Ms. Kitchen accompanied me during the walk-through inspection.

PTI No. 15-09A contains emission limit restrictions/permit conditions to opt the facility out from being a major source of HAPs. This permit also contains VOC emission restriction of 30 tons per year (tpy) based on monthly 12-month rolling totals to make the permit a synthetic minor permit and opt the facility out of the Clean Air Act of 1990, Title V, Renewable Operating Permit (ROP) program requirements. During the inspection, I determined the facility's compliance with PTI No. 15-09A applicable requirements.

Total Door fabricates, primes, and coats, custom-built metal and wood doors. The process for building metal doors starts with sheet metal going into the automated phosphate/cleaning and drying line to remove any dirt/grease. Next, the sheet metal goes into the forming/bending line area. The metal is punched using a turret punch system, cut for window opening, and bent on along the edges.

Two sheets of formed metal are sent to the roll coat line (EU-ROLL). Water based adhesive is applied to both sheet metal and a foam core with flow-coat and roll-coat applicators. The facility also uses epoxy glue. 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 door is taken to the door body assembly area for final fabrication (welding, cutting, etc.) according to the door specifications. The finished doors are then hung onto racks and taken by automated conveyor system to the coating process area.

The coating process area has a paint mixing area, a UV primer booth, electrostatic applicators paint booths (EU-ELECTRO), hand held HVLP applicator booths (EU-HANDHLD), and two curing ovens. After being primed, the automated conveyor

system takes 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, the doors go through final assembly work such as assembling the remaining door components, packing, and storage ready for shipment to customers.

PTI No. 15-09A was issued to Total Door for the operation of three surface coating lines, EU-ELECTRO, EU-HANDHLD, and EU-ROLL. In addition, this permit also includes flexible groups, FG-COATING and FG-FACILITY.

EU-ELECTRO – pertains to a spray coating line consisting of a booth with hand held HVLP applicators and two associated cure ovens common to EU-ELECTRO and EU-HANDHLD used to apply primer and topcoat to metal doors and topcoat to color samples that includes purge and clean-up operations associated with this coating line. The facility utilizes dry filters as particulate control. During my inspection, the line was not in use. Per PTI No. 15-09A, Special Condition EU-ELECTRO (III.1), I observed the filters were installed and maintained properly as I did not observe any gaps. Per PTI No. 15-09A, Special Condition EU-ELECTRO (I.1), the MAERS submitted records showed the monthly 12-month rolling total VOC emission rate for FY 2017 was 5.12 tons for end of December 2017 and less than the 10 tons/year permit limit. Submitted recordkeeping also showed 5.13 tons/year for 12-month rolling totals at the end of December 2017. Per PTI No. 15-09A, Special Condition EU-ELECTRO (I.2), submitted records showed that the highest monthly VOC emission rate in EU-ELECTRO, from January 2017 through May 2018, occurred in August 2017 at 1,098.15 lb. and less than the 2,000 lb./month permit limit.

EU-HANDHLD – pertains to the spray coating line consisting of a booth with hand held HVLP applicators and two associated cure ovens common to EU-ELECTRO and EU-HANDHLD used to apply primer and topcoat to metal doors and topcoat to color samples that includes purge and clean-up operations associated with this coating line. This line utilizes dry filters as particulate control. During my inspection, the line was not in use. Per PTI No. 15-09A, Special Condition EU-HANDHLD (III.1), I observed the filters were installed and maintained properly as I did not observe any gaps. Per PTI No. 15-09A, Special Condition EU-HANDHLD (I.1), the MAERS submitted records showed the monthly 12-month rolling total VOC emission rate for FY 2017 was 0.42 ton for end of December 2017 and less than the 10 tons/year permit limit. Submitted recordkeeping also showed 0.42 ton/year for monthly 12-month rolling total at the end of December 2017. Per PTI No. 15-09A, Special Condition EU-HANDHLD (I.2), submitted records showed that the highest monthly VOC emission rate in EU-HANDHLD, from January 2017 through May 2018, occurred in January 2017 at 228.90 lb. and less than the 2,000 lb./month permit limit. Per PTI No. 15-09A, Special Condition EU-HANDHLD (IV.2), HVLP applicator was used to spray paint.

EU-ROLL – pertains to the curtain coat line used to apply adhesive to metal doors and foam core material with flow-coat and roll-coat applicators and includes purge

and clean-up operations associated with the coating line. During my inspection, the line was not in use. Per PTI No. 15-09A, Special Condition EU-ROLL (I.1), the reported MAERS and submitted recordkeeping showed the monthly 12-month rolling total VOC emission rate for FY 2017 at 1.85 lb. for end of December 2017 and less than the 5.8 tons/year permit limit. Per PTI No. 15-09A, Special Condition EU-ROLL (I.2), submitted records showed that the highest monthly VOC emission rate in EU-ROLL, from January 2017 through May 2018, occurred in May 2017 at 0.25 lb. and less than the 2,000 lb./month permit limit.

FG-COATING – pertains to all coating operations at the facility including facility-wide cleanup and purge activities. Per PTI No. 15-09A, Special Condition FG-COATING (I.1), the highest monthly 12-month rolling total VOC emission, from January 2017 through May 2018, was reported in May 2018 at 5.70 tons and less than the 30 tons/year permit limit. Per PTI No. 15-09A, Special Condition FG-COATING (I.2), the highest monthly VOC emission rate, from January 2017 through May 2018, was reported in July 2017 at 1194.44 lb./month and less than the 2,000 lb./month permit limit.

FG-COATING also establishes limits for Xylene at 56.54 lb./day and P-Chlorebenzotrifloride at 39.57 lb./day. Per PTI No. 15-09A, Special Condition FG-COATING (I.3), the highest monthly Xylene emission was reported in January 2018 at 0.403 ton. At a conservative 20 work days a month, the daily Xylene emission average rate was 40.30 lb./day and less than the 56.54 lb./day permit limit. Per PTI No. 15-09A, Special Condition FG-COATING (I.4), the highest monthly P-Chlorobenzotrifluoride emission was reported in January 2018 at 0.0218 ton. At a conservative 20 work days a month, the daily P-Chlorobenzotrifluoride emission average rate was 2.18 lb./day and less than the 39.57 lb./day permit limit.

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 – establishes source-wide emission limits for individual and aggregate Hazardous Air Pollutants (HAPs). Individual HAP must be less than 9 tons/year. Aggregate HAPs must be less than 22.5 Tons/year. Per PTI No. 15-09A, Special Condition FG-FACILITY (I.1), the highest monthly 12-month rolling total individual HAP, from January 2017 through May 2018, was Xylene and recorded in May 2018 at 2.3319 tons. This was less than the 9 tons/year permit limit. Per PTI No. 15-09A, Special Condition FG-FACILITY (I.2), the monthly 12-month rolling total aggregate HAPs, from January 2017 through December 2018, was recorded at 3.4724 tons. This was less than the 22.5 tons/year permit limit.

During walk-through inspection, I observed the forming/bending and cutting equipment at the facility that 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).

Overall, I did not observe any non-compliance issues during the inspection,

NAME K. M. Ji

DATE 9/17/2018

SUPERVISOR Joyce BL