

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

B709842693

FACILITY: TRENDWAY CORPORATION		SRN / ID: B7098
LOCATION: 13467 Quincy Street, HOLLAND		DISTRICT: Grand Rapids
CITY: HOLLAND		COUNTY: OTTAWA
CONTACT: Tom Geyer, Environmental Sustainability Manager		ACTIVITY DATE: 12/13/2017
STAFF: Tyler Salamasick	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY 2018 FCE inspection.		
RESOLVED COMPLAINTS:		

### Background

Trendway Corporation SRN: B7098 is a furniture manufacturing facility that specializes in manufacturing office and institutional furniture as well as architectural products. The production facility is located at 13467 Quincy Street, Holland, Michigan. Trendway is located in an industrial park with the nearest residential structure approximately 750 feet SW of the facility. The facility was inspected on 12/13/2017 by Tyler Salamasick, Environmental Quality Analyst of the Michigan Department of Environmental Quality, Air Quality Division. The purpose of the inspection was to determine compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; PTI No. 198-12 and PTI No. 226-98. Permit 198-12 is a foam coating permit for multilayer polyurethane and topcoat application. Permit 226-98 is an opt out permit for hazardous air pollutants (HAPs). The permit establishes source wide limits of individual HAPs to not exceed 10 tons per 12 month rolling time period and aggregate HAPs to not exceed 25 tons 12 month rolling time period.

### Inspection

Site arrival was at 10:28 am, 12/13/17. Upon meeting, I presented my State of Michigan identification card, informed the facility representative of the intent of my inspection and was permitted onto the site. Tom Geyer, Environmental Sustainability Manager showed me the facility and provided me with records as required by the permits. Tom informed me that the facility has approximately 300 employees and normally operates 10 hour days Monday through Thursday with occasional work on Friday. The facility manufactures various office and institutional furniture components. This includes, but is not limited to wall systems, ceiling grids, architectural products, chairs and tables. After discussing the facility, Tom showed me the production areas.

The facility has multiple production lines. These lines start at the shipping and receiving area and work their way through the plant. Trendway has multiple different product stages, and each product has goes through various modifications at the different stages. Over the past several years Trendway has phased out the use of solvent (VOC) and HAP based coatings and has switched to water based or non HAP or low HAP coatings on most of their production lines. Trendway has also stopped venting some of their non HAP low VOC coatings to the ambient air. I informed Tom that it may be appropriate to make a permit modification to reflect this change in the process, even if it is a significant emission reduction.

### PTI No. 198-12

Trendway has a multilayer foam coating process which is permitted under PTI No. 198-12. The emission unit (EU-FoamCoating) is a two booth spray coating operation. The coating booths utilize a polyurethane foam coating and a VOC based topcoat. The particulate emission from the process are controlled by a fabric filter system. The VOCs are uncontrolled.

The permit limits emissions from EU-FoamCoating to 8.0 tpy of VOCs and acetone. The facility

maintains records of the VOC and acetone usage. These records indicated the facility emitted 2.32 tons of VOC/acetone in 2017 and 2.79 tons in 2016. This is below the 8 tpy limit of VOC and acetone emissions set by the permit. The records do not appear to have a 12 month rolling value for each month as specified in the permit. The data required to calculate a 12 month rolling value appears to be present with the records that have been submitted. Trendway should update their records to better reflect the requirements of the permit.

The permit limits the VOC content to 4.2 lbs/gal for primer and 4.6 lb/gal. The facility has phased out most VOC based coatings and has switched to a water base. The coatings appear to meet this requirement.

The permit requires that all waste materials are stored in closed containers. It also requires that the permittee disposes of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. I did not observe any open solvent containers in the foam coating area. The room was relatively clean and well kept. It appeared that Trendway was properly handling their materials.

The permit requires that EU-FoamCoating is not operated unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner. At the time of my inspection EU-FoamCoating was not being utilized, but Trendway did have exhaust filters installed. Trendway appears to comply with this condition of the permit.

In order to show compliance with the conditions of the permit, Trendway is required to maintain records. Tom showed me electronic and hard copies of the records while I was on site. I requested that Tom provide me with an electronic copy of the records.

#### PTI No. 226-98

Permit No. 226-98 covers the facility wide limits along with various processes at the facility. The source wide conditions limit the emissions of single HAPs and aggregate HAPs. The facility wide limit does not establish limits for VOC emissions, though it does limit VOC emissions per process item. Combine, the permits limit the VOC emissions to 49.52 tpy based upon a 12 month rolling time period. This limits the potential of the main sources of VOCs at Trendway. In addition to these limits Trendway has voluntarily reduced their VOC and HAP emissions well below the permitted amount.

The laminator operations have a methylene chloride emission limit of 0.2 parts per million by volume (ppm). The facility has discontinued the use of methylene chloride multiple years prior. The facility no longer uses this chemical and meets the emission limit. The permit also limits the VOC emission rate to 8.23 lbs per hour and 17.12 tons per year. Since the issuance of the permit (1998-2001) Tom indicated the facility has reduced the laminator VOC content to approximately 0.01 lbs/gal. The laminator process was not being operated at the time of my inspection. I did observe the hand-written checklist that is used to track material usage. I did not request a copy of the hand-written notes, as the information is also demonstrated in the electronic spreadsheet.

The volatile organic compound (VOC) emission rate from the adhesives application operation shall not exceed 8.23 pounds per hour, nor 17.12 tons per year based on a 12-month rolling time period as determined at the end of each calendar month. The records indicated the highest emission for the year of 2016 was 0.0 tons per 12 month rolling with a average hourly emission of 0.03 lbs. These values are well below the permit limit and appear to demonstrate compliance with the permit emission rate requirements.

The permit requires that the lamination process not emit particulate in excess of 0.10 per 1,000 pounds of exhaust gas. The facility did not test the baghouse, but it appears to be operating properly.

The permit covers five spray booths. The booths are used for the application of plastic fabric adhesive, tack board adhesive, general adhesive and wet paint. Tom informed me that the facility uses non-VOC adhesives. The only significant VOC emissions were from the solvent based single paint line.

The permit requires that the facility have properly installed particulate filters on the booth. While inspecting the paint booth, Tom showed me the filters and the pressure drop. The gauge had a clearly marked operating range which helped indicate to the booth operator, when the filters needed to be changed.

In addition to the adhesive coating lines, PTI No. 226-98 also permits three chair assembly lines. The permit limits VOC emission rate from the three adhesive spray booths shall not exceed 8 pounds per hour nor 11 tons per year based on a 12-month rolling time period as determined at the end of each calendar month. These limits are based upon maximum coating usage rates of 1.5 gallons per hour and 4,000 gallons per year. The facility no longer uses VOC based adhesives and it appears the facility meets the emission rate. The facility should modify their permit to reflect the current low VOC operations at the facility more accurately.

The permit also requires that the exhaust gases from the three adhesive spray booths are discharged unobstructed vertically upwards to the ambient air from three stacks each with a maximum diameter of 24 inches at an exit point not less than 28 feet above ground level. Since the facility has switched its coatings to non-VOC it has removed the stacks and ceased emitting air contaminants to the outside air. Trendway should modify their permit to reflect the changes at the facility more accurately.

PTI No. 226-98 covers the facility powder coating line. The permit limits particulate emissions from each powder coating spray booth to not exceed 0.01 pounds per 1,000 pounds of exhaust gas. The coating line is not externally vented and appears to meet this condition.

The powder coating operation has an associated rack burn-off oven. The oven particulate emissions are limited to 0.01 pounds per 1,000 pounds of exhaust gas. The ovens were not tested, but are equipped with an afterburner. The ovens were not operating at the time of my inspection. I did observe a gauge that indicated the after burned was set to 1500F This is 100 degrees F over the minimum control temperature set by the permit. This complies with the permit requirements.

PTI No. 226-98 permits woodworking operations, woodworking operations II and woodsanding operations. Each operation is permitted as a separate process. During the inspection Tom indicated that they are all controlled by the combined baghouses. The processes were operating at the time of my inspection. Trendway's baghouses are designed in a manner that allows the facility to emit the baghouse exhaust gas back into the in-plant environment. This is done in part to offset heating costs during cold weather months. I did not observe any opacity or dust being emitted. Also since the process was being vented internally it appears that the facility meets the emission rate of 0.01 pounds per 1,000 pounds of exhaust gas, as defined by the PTI.

PTI No. 226-98 establishes source wide HAP emissions. The facility is limited to less than 10 tons per year for any individual HAP or less than 25 tons per year for any combination of HAP's at this stationary source. The facility is required to demonstrate these limits through the use of records and material use tracking. Tom provided me with electronic records which indicated that the highest aggregate HAP 12 month rolling total for 2016 was 0.65 tons. This is below the aggregate HAP emission limit as defined by PTI No. 226-98. The highest single HAP emission was dibutyl phthalate.

During the last 2 years the highest emission of dibutyl phthalate was 0.326 tons. This is below the individual HAP emission limit as defined by PTI No. 226-98.

The permit also requires that the facility develops and implements a preventative maintenance plan (PMP) for the facility. I did not request a record of the plan.

Conclusion

It appears that Trendway is in compliance the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; PTI No. 226-98 and PTI No 198-12.

NAME [Signature] DATE 1/8/18 SUPERVISOR [Signature]