# DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: On-site Inspection

B709863317

FACILITY: TRENDWAY CORPORATION		SRN / ID: B7098		
LOCATION: 13467 Quincy Street, HOLLAND		DISTRICT: Grand Rapids		
CITY: HOLLAND		COUNTY: OTTAWA		
CONTACT: Debra Hickerty , Director of Manufatcuring		<b>ACTIVITY DATE</b> : 06/22/2022		
STAFF: Chris Robinson	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT		
SUBJECT: FY '22 inspection to determine compliance with PTI no. 226-98 and any other applicable air quality rules and regulations.				
RESOLVED COMPLAINTS:				

Chris Robinson (CR) from the Department of Environment, Great Lakes, and Energy's (EGLE) Air Quality Division (AQD) was on site to conduct an inspection of Trendway Corporation (SRN B7098) on June 22, 2022. The facility is located at 13467 Quincy Street in Holland, Michigan. Prior to entry CR surveyed the perimeter of the facility along 136<sup>th</sup> Street and Quincy Street for odors and visible emissions. None were observed. Weather conditions were fair with a temperature of approximately 80°F and west-northwest winds at 10 mph (www.weatherunderground.com).

The initial inspection was attempted on June 17, 2022. Lobby doors were locked and AQD contact numbers were no longer valid. CR contacted the phone number on the door and was informed that Trendway primarily operates 4 10-hour shifts Monday through Thursday with minimal staff on Friday. CR was also provided contact information for Debra Hickerty.

CR met with Ms. Debra Hickerty, Manufacturing Director on June 22, 2022. Proper identification was provided, and Ms. Hickerty was informed that CR was onsite to conduct a routine inspection and to follow-up on a request to void PTI no. 198-12. Ms. Hickerty contacted Trendway's Environmental Consultant by Teams for a quick meeting. The PTI void request, a recent voluntary disclosure notification and PTI no. 226-98 were discussed with the group. Afterwards, Ms. Hickerty provided a walkthrough of the facility and additional information. Afterwards, some discrepancies were noticed between the records, permit, and observations. CR met with the facility's consultant onsite on July 26, 2022, for another walkthrough.

#### A) Facility Description

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. This facility operates under two (2) PTI's (Permit-to-Install), PTI No. 198-12 and PTI No. 226-98.

## **B) Compliance Evaluation**

# 1) PTI No. 198-12

AQD Permit Section staff notified CR in late May that a PTI application was received to modify this PTI to void it since the equipment was no longer onsite. Onsite observations during the June 22, 2022, inspection confirmed this, therefore CR informed Permit Section staff on June 27, 2022, that it was acceptable to void the PTI.

#### 2) PTI No. 226-98

This PTI is both a Title V opt-out permit for Hazardous Air Pollutants allowing the facility to Opt-Out of the Title V program (40 CFR Part 70) and a Synthetic Minor permit limiting baghouse particulate matter (PM) emissions to below permitting Significance Levels to remain exempt from Michigan's New Source Review. It consists of nine (9) sections (Laminator Operations, Five Spray Booths, Three

Chair Assembly Spray Booths, Powder Coat Line, Woodworking Operations, Woodworking Operations II, Woodsanding Operations, Stationary Source-Wide Conditions, and Recordkeeping Requirements) which are discussed below.

### **Laminator Operation**

The laminator operations are subject to a methylene chloride emission limit of no more than 0.2 ppm by volume (Special Condition (SC) 16), volatile organic compound (VOC) emission limits of 8.3 pounds per hour and 17.12 tons per year based on a 12-month rolling time period (SC 18), and a particulate matter (PM) emissions limit of no more than 0.10 pounds per 1,000 pounds of exhaust gases. Records were provided. Methylene chloride usage ceased prior to the last inspection and has not been used since. Compliance with the PM emission limit is demonstrated through proper maintenance and operation of the baghouse. Per SC 18 the brush cleaner and edge trimmer operations shall not be operated unless the baghouse is operating properly. Special Condition 19 requires the exhaust gasses from the brush cleaner and edge trimmer to be discharged unobstructed vertically upwards. Per Jeff (Maintenance) the unit's panel brush cleaning and edge trimming system are no longer functional and are done manually. Since the facility no longer uses methylene chloride containing adhesives and cleaning and trimming is done manually, the stacks were disconnected. Therefore, this unit now vents internally. Compliance with the PM emission limit is unknown since compliance is determined based on proper operation and maintenance of a now disconnected baghouse. The permit language should be modified to match current operations and to determine if the baghouse is still required for manual cleaning and trimming. Per 12-month rolling records, 0.000 tons of VOCs were emitted from June 2021 - May 2022. Per monthly data, 12month VOC emissions were actually 0.000022 tons. The facility may be averaging monthly totals over a 12-month period to calculate rolling emissions. 12-month rolling data should be the summation of the 12-month data, not an average. Due to the low emissions, it is unlikely that a summation would lead to an exceedance of the limit. However, the facility should verify and correct the calculations if necessary.

While talking to maintenance on July 26, 2022, it was noted that another laminator was installed approximately 2 years ago which replaced an older laminator. It's not clear if the older laminator was permitted or exempt from permitting but the new laminator appeared to be exempt from Rule 201 permitting per Rule 287(2)(i) for equipment used for the application of a hot melt adhesive, which is what this laminator is used for.

#### **Five Spray Booths**

The booths are used for the application of plastic fabric adhesive, tack board adhesive, general adhesive, and wet paint. Per SC 21 VOC emissions from the 5 booths shall not exceed 3.1 pounds per hour nor 13.4 tons per year (based on a 12-month rolling time period) and Per SC 22 the booths shall not be operated unless particulate filters are in place and operating properly. Filters were in place and appeared to be in good condition. 12-month rolling emission calculations were provided. Ten (10) active booths were identified with no way to determine which belong to this section of the permit. Also, only 8 booths were identified on the July 26, 2022, inspection. The facility needs to work through this and amend records as necessary. However, the total VOCs from June 2021 through May 2022 for all of these booths combined were 0.437 tons. As with the laminator many of the booths are listed as "0.000" and may not reflect actual due to significant digits. However, this would not increase emissions to a point that would come close to exceeding the 13.1 tpy limit.

During the inspection six (6) booths were identified to be part of the Five Spray Booth area. After discussions with maintenance, it was determined that one of the 6 included 80 west which was identified as being part of the Three Chair Assembly Spray Booths (see discussion below). That left the 5 remaining booths, which appeared appropriate. Booth 24 was observed but was noted as being exempt per Rule 287(2)(c) and not part of the 5 remaining booths. However, upon further review of the facility's records Booth 24 is being included with the five, which now brings the total observed booths for the "Five Spray Booths" back up to six (6), which indicates that either the facility records are incorrect or the wrong booths have been identified. Records indicate that Booth 63 East was removed from Service in December of 2010. With five (5) active booths still being identified, this suggests that the facility swapped the decommissioned booth out for another. Permitted emission units cannot be replaced, modified, or reconstructed without a new permit, a permit modification, or being covered under a permit exemption.

The maximum monthly adhesive usage recorded for Booth 24 for June 2021 through May 2022 was 20 gallons (July 2021), which is well under the 200 gallon/month limit allowed by Rule 287(2)(c). If this booth is exempt from permitting as claimed during the July 26 visit, then this appears appropriate. However, if the booth should be part of the Five spray booth section of the permit, then use of Rule 287(2)(c) is not allowed.

#### **Three Chair Assembly Spray Booths**

The three chair assembly booths are used to apply an adhesive to foam and wood. The two materials are then pressed together to form a chair seat. Fabric is then manually stapled to the frame of the chair.

As noted during the previous AQD inspection conducted on 12/13/2017, the facility has switched its coatings to non-VOC and ceased emitting air contaminants to the outside air by removing the stacks. Special condition 24 requires the spray booths to be discharged unobstructed vertically upwards to ambient air from three stacks with a maximum diameter of 24 inches at an exit point not less than 28 feet above ground. Since this is a permitted requirement, missing stacks would still be a violation of these requirements even if the coating no longer contains VOCs. However, per a subsequent file review the booths in question did not appear to be part of the "Three Chair Area." In response to a Violation Notice issued on July 25, 2005, for failure to maintain records and adhesive booth stacks, Trendway responded by indicating that two of the three booths in this area were permanently removed, and another adhesive booth was relocated somewhere else in the plant and a new booth (80 West) was installed where the relocated booth had originally been, also clarifying that 80 West was not a reinstallation of one of the permanently removed booths. That means that the only booth subject to these requirements is now located elsewhere in the facility. For clarification, a second visit was conducted on July 26, 2022, with the facility's consultant. While discussing this with Maintenance, maintenance confirmed that the only remaining spray booth was 80 West, which according to the VN response was the newly installed spray booth. Therefore, the original permitted booths covered under the "Three Chair Assembly Spray Booths" no longer exist and this section of the PTI is no longer applicable. Trendway is claiming 80 west as exempt from Rule 201 under Rule 287(2)(c) for coating operations with less than 200 gallons per month, which seems acceptable based on the records which indicates that the maximum monthly usage from June 2021 through May 2022 was 10 gallons (March 2022). Also, Rule 287(2)(c) does not require

stacks, only proper dry filters, which were installed and appeared to be in exceptionally good condition.

#### **Powder Coating Line**

The powder coating line, which originated from PTI 1030-89 and was voided when consolidated to PTI 226-98, consists of a seven (7) stage washer, one (1) dry-off oven, three (3) spray booths, one (1) bake oven, and one (1) rack burn-off oven. Particulate matter from the three spray booths is controlled by individual baghouses attached to each booth. Filters are not visible, but no emissions were visible exiting the baghouses which vent internally. Proper maintenance, operation, and lack of visible emissions demonstrates compliance with Special Conditions 26, 28, and 30 of the PTI.

According to the application for PTI 1030-89 the oven being reviewed at that time was for a Blu-Surf Model 6608 with a burner rating of 390,000 BTUH (Max). The current oven appears to be manufactured by Jackson Oven with a burner rating of 750,000 BTU/hr., which may be the ratings for both the afterburner and oven combined. The facility's consultant indicated in an email on 6/29/2022 that the estimated install date was believed to be 2015, confirming speculation that the oven onsite has been replaced. Installation prior to modifying a PTI or obtaining a new PTI is considered a Rule 201 violation. Compliance with the PTI conditions for the Burn-off oven were not evaluated further since they are not applicable to the current burn-off oven.

#### **Woodworking Operations, Woodworking Operations II, and Wood sanding Operations**

Area/PTI Emission Unit	Baghouse/Trendway ID	Emission Limit (lbs. PM/1,000 lbs. of exhaust gas)
Woodworking I	24,600 CFM Dustar / BE-0086	0.01 lb.
Woodworking II	16,000 CFM Carter Day / BE- 0024	0.10 lb.
Woodsanding	32,000 CFM Alanco / BE-0260	0.036 lb.

Special Conditions 34, 36, and 39 prohibit the operation of the equipment covered in these areas without its respective baghouse being installed and operated properly. Per discussions the equipment is never operated without proper control. The three baghouses listed above were operating during the visit on July 26, 2022. They appeared to be in good working condition and no visible emissions were noted (SC 38). The facility conducts preventative maintenance frequently, examples attached. Emission limits are based on proper operation. Since the three baghouses appear to be operated and maintained properly the facility also appears to be operating within the specified emission limits (SC 33, 35, and 37).

## **Recordkeeping Requirements**

Special Condition 40 requires the facility to develop and implement a Preventative Maintenance Plan (PMP) with a minimum requirement to address the preventative maintenance of the baghouses for the woodworking processes. Routine inspections are conducted, and maintenance is performed as needed. Examples of the PM work orders/inspections are attached. Records required by SC 42 were provided and are attached.

#### **Stationary Source-Wide Conditions**

This section contains the source-wide emission limits limiting the facility's emissions of hazardous air pollutants (HAPs) to below Title V thresholds of 10 tons per year (tpy) for any individual HAP or 25 tons for all HAPs combined, based on a 12-month rolling time period. Since the emission limits are 90% of the 10/25 tpy limits this PTI went through public comment prior to issuance. Based on calculations provided by the facility the combined 12-month rolling HAPs emitted from June 2021 through May 2022 were 0.2301 tons for September 2021. The source identified Toluene as the individual HAP of concern with a 12-month rolling maximum emitted of 0.1423 tons, also in September 2021. Future records should include usage and emissions for all individual HAPS used. There appears to be no source-wide HAP emission exceedances.

## 3) MAERS

Emissions for calendar year 2021 were submitted on time (March 23, 2022) by the facility and reviewed by AQD on May 17, 2022. Mass balance and MAERS emission factors are being used for the basis of the calculations. No documentation initially provided. With approval from the primary preparer attachments were uploaded by AQD. No other changes were made. A summary of the 2021 emissions data submitted is below.

Pollutant	Amount (Tons)
PM10	0.86
VOC	0.37

# 4) Miscellaneous

Trendway submitted a Voluntary Disclosure notification to the AQD in March 2022 citing multidivisional violations found in an audit conducted in early 2022. Regarding Air quality, the letter claims that Trendway is in violation of their PTI no. 226-98 since equipment covered under this PTI has been removed without modifying the permit.

The AQD does not require a permit modification prior to equipment removal or decommissioning. A PTI modification is only required if the equipment is modified, as defined in **R 336.1113(e)**, reconstructed, as defined in **R 336.1118(b)**, or if it is replaced entirely. **R 336.1201** of Michigan's Air Pollution control Rules establishes when an initial/modification PTI is required.

#### **C)** Compliance Determination

Based on the observations and discussions during the inspection and subsequent records review Trendway Corporation is not operating in compliance with applicable air quality rules and regulations. Specifically, Trendway is in violation of Rule 201 for the installation of the new burn-off oven without a new or modified PTI. A Rule 201 Violation Notice will be issued for the ~2015 installation of the burn-off.

Components of the PTI 226-98 are no longer applicable, specifically everything regarding the burn-off oven, the Three Chair Assembly Spray Booths, and the laminators brush cleaning/trimming, venting and use of Methylene chloride. Therefore, AQD recommends that Trendway evaluate all emission units in their current configuration, including the exempt units, and either modify the current permit accordingly or re-permit as needed, and/or confirm appropriate exemptions are being used. In addition, CR has also requested that all of the spray booths be labeled so as to eliminate any confusion in the future.

DATE 8/4/2022

SUPERVISOR\_