

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

N266445556

FACILITY: PIONEER CABINETY INC		SRN / ID: N2664
LOCATION: 301 WRISING, DAVISON		DISTRICT: Lansing
CITY: DAVISON		COUNTY: GENESEE
CONTACT: Chad Fackler , Operations Manager		ACTIVITY DATE: 07/24/2018
STAFF: Samantha Braman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Unannounced, scheduled inspection for compliance with PTI 1004-90H.		
RESOLVED COMPLAINTS:		

Purpose: Unannounced, scheduled inspection for compliance with permit No. 1004-90H issued on December 2013.

Location: Pioneer Cabinetry is in a slight industrial and residential area. The facility is approximately 105 feet from the nearest surface water (Black Creek), 149 feet from the nearest residence, 230 feet from a neighborhood park, 531 feet from an intermediate school and 1,100 feet from an elementary school. (See map attached).

Facility Background/Regulatory Overview: Pioneer operates on one shift, five days per week. Their main operations consist of wood-working boards into kitchen cabinets, some of which are coated in stain, paint and sealer. Pioneer Cabinetry is considered an opt out synthetic minor source of air emissions. The facility operates under a Permit to Install No. 1004-90H issued on 12/17/2013.

A *synthetic minor* permit limits the facility's potential to emit (PTE) for five of the criteria pollutants: carbon monoxide, nitrogen oxides, sulfur dioxides, volatile organic compounds, and particulate matter to keep it from becoming a major source.

Fee Status: Pioneer Cabinetry submits an annual emissions report to MAERS but is not considered a fee subject source.

Inspection:

Arrived: 9:50 AM
 Departed: 11:30 AM
 Weather 72°F, wind SW at <5 MPH

Brad Myott and I noted level 2 paint odors heading South on Dayton Rd surrounding the facility. There were no noticeable odors at the adjacent park. There were no visible emissions from the facility upon arrival.

B. Myott and I met with Chad Fackler, Operations Manager. We explained why we were there and some of the equipment we wanted to look at and what is required under the permit. C. Fackler accompanied us on a tour of the facility.

No.	Emission Unit or Flexible Group	Description	Permit Number or Exemption	Comp. Status
1	EUBOOTH1A	Booth for applying stain and sealers.	1004-90H	C
2	EUBOOTH1B	Booth for applying stain and sealers.	1004-90H	C
3	EUBOOTH2	Booth for applying washcoats, sealers, and topcoats.	1004-90H	C
4	EUBOOTH3	Disconnected unused booth.	1004-90G	C
5	EUBOOTH4	Automated conveyerized multi-spray head reciprocating booth and oven coating line.	1004-90H	C
6	FGFACILITY			C

1 & 2. EUBOOTH1A & EUBOOTH1B: Both booths were in operation. Multiple layers of varying dimension cardboard filter paper is used in each booth to catch overspray. These filters are changed every week or as needed. Booth discharge stacks appeared to satisfy the height and dimension requirements.

Records are being maintained as required. According to C. Fackler, the data input is collected as gallons of weekly inventory used. Sandy from purchasing is responsible for maintaining the paint records. MSDS are used to determine VOC and HAP content of the coatings. Changes are made when new coatings or new formulations are added.

HVLP guns are in use in booth 1B. This is the only booth that utilizes a HVLP pressurized spray gun, the rest are all air assisted airless sprayers. Booth 1B is not used very often. Chad mentioned there has been talk of decommissioning this booth and combining it with Booth 2.

All waste coatings and purge solvent are collected and distilled for reuse. The stills are exempt from Rule 201 by Rule 285(u). Solvents are recycled and reused for purge and cleanup purposes. The stills are used for all coating lines.

3. EUBOOTH2: The discussion above applies to this emission group as well.

Each paint booth has its own supervisor in charge of it. The supervisor of this Booth 2 tracks filter replacement with the air intake and replaces as needed.

The wood components finished in the above coating booths are cured in a belt conveyor natural gas fired oven. A second oven is currently not being used

4. EUBOOTH3: No longer in use, has been removed.

5. EUBOOTH4: The Superfici/Binks Spray line and Lochinvar Oven is the newest line. It is an automated conveyorized multi-sprayhead reciprocating booth with a tunnel oven. It will be used for basecoats, topcoats, and sealers. The spray-heads are air assisted airless technology.

The conveyor automatically cleans itself and the solvent paint mix is returned to the spray pot for reuse.

Both the ovens vent out one stack, while the paint booth vents out a separate stack.

Inside the paint booth there is 3 layers of filters on the bottom. The first mesh layer is changed every day, the middle cardboard layer is changed as needed, and the third layer of mesh is changed every weekend. The mesh blend filter on the top is changed as needed. When the filter needs to be changed, there will be some fugitive paint that escapes the small openings where the conveyer enters and exits the booth, and the quality of the paint application is also known to be compromised.

6. FGFACILITY: Although acetone is not a VOC nor a HAP, it has been restricted as a toxic air contaminant of concern. The acetone portion of each coating is being recorded and included in compliance determinations.

Records of 12-month rolling emissions are being maintained as required. The following values show compliance.

FGFACILITY			
Pioneer Cabinetry 12 month period ending December 2017			
Pollutant	Reported	Limit	Unit
VOC + acetone	40.97	90.0	Ton/year
Formaldehyde	0.01	0.2	Ton/year
Individual HAP (xylene)	2.74	9.0	Ton/year
Aggregate HAP	10.47	22.5	Ton/year

Comments/Concerns:

1. Titebond Wood Glue is used at the Glue Wheel for manual application followed by clamping. Usage of this glue is not currently accounted for in VOC emissions. This glue meets the exemption 287(a) that limits adhesive coating to 2 gallons per day.
2. In the Formaldehyde Emission Rate records provided to us, the max emission limit in tons per year is listed as 0.71; however, the permit indicates the max limit is 0.2. Recommended changing this to reflect the permit limit.
3. Maintaining good housekeeping around dust collectors is recommended.
4. Strong odors were noted in the paint kitchen. This area is enclosed, and all containers appeared to be close. Company should be aware of excess odors from this location. Future efforts may be needed to minimize fugitive odors escaping this area during loading and unloading.

Recordkeeping: Chad, Brad, and I sat down after the tour of the facility to talk about record keeping requirements for the permit. Chad provided us with records of their 12 month rolling average of VOC, Formaldehyde, Acetone and HAP (Hazardous Air Pollutants) emission rates. Upon request, Chad also gave us a copy of the Safety Data Sheet for the Titebond wood glue that they use, along with a yearly usage. After some email correspondence following the inspection it appears that the wood glue usage is 363 gallons per year. Assuming that the glue is used every workday, that would put the daily usage around 1.39 gallons. This meets the exemption outlined in Rule 287(a) which states that the adhesive application shall not exceed 2 gallons per day. For future inspection purposes it was recommended that they have records available, minimally quarterly, to be able to demonstrate they are not exceeding the 2 gallon per day limit in order to meet the exemption.

Summary: Facility appeared to be in compliance with their permit and all applicable state air regulations. No violations were noted during this inspection.

NAME Santha Brainer DATE 8/21/18 SUPERVISOR O.S.M.