

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

N266424545

FACILITY: PIONEER CABINETRY INC		SRN / ID: N2664
LOCATION: 301 W RISING, DAVISON		DISTRICT: Lansing
CITY: DAVISON		COUNTY: GENESEE
CONTACT: Chad Fackler , Operations Manager		ACTIVITY DATE: 03/05/2014
STAFF: Brian Culham	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: This inspection completes a Full Compliance Evaluation. This was also the initial meeting with Chad Fackler.		
RESOLVED COMPLAINTS:		

Chad Fackler – Operations Manager - cfackler@pioneercabinetry.com

This inspection completes a Full Compliance Evaluation. This was the initial meeting with Chad Fackler.

Pioneer Cabinetry is located on the southwest side of Davison, Michigan. It is a block south of the rail tracks and about a block northwest of the elementary school and a public park. The immediate area is primarily light industrial and commercial.

Pioneer Cabinetry purchases hard wood boards which it saws, miters, routs, and sands. Some of the wood boards are coated with stain and/or paint and sealer. The boards are assembled into kitchen cabinets.

The coatings applied by Pioneer are solvent based and contain some Hazardous Air Pollutants (HAPS). Because there are four separate booths, the Potential to Emit (PTE) of VOC is expected to be greater than the Clean Air Act (CAA) Title V threshold of 100 tons VOC annually. Similarly, PTE for HAPs is expected to exceed the CAA Title V threshold of 10/25 tons of single/combined HAP annually. A permit to install 1004-90 was issued to Pioneer to restrict emissions of these pollutants and establish Pioneer Cabinetry as a Synthetic Minor source, thus avoiding the requirement to obtain a Renewable Operating Permit (ROP). Pioneer Cabinetry is also considered an Area Source. A recent revision to the permit, 1004-90H, was issued December of 2013. A new EUBOOTH4 replace EUBOOTH3.

Because Pioneer is a Synthetic Minor source of HAPs they are not subject to 40 CFR 63 Subpart JJ, the National Emission Standards for Wood Furniture Manufacturing Operations.

40 CFR 63 Subpart HHHHHH, the National Emission Standards for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources does not apply to Pioneer Cabinetry because the substrates being coated do not include metal or plastic.

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

I arrived unannounced at 8:30 am. I did not identify any odors that would be associated with Pioneer Cabinetry upon arrival. I met with the Operations Manager, Chad Fackler. He replaced Mike Eggerer and has only been in the position a year. I showed my credentials and gave him the entry brochure. I spent a little time explaining basic Air Quality regulations with him.

Chad Fackler accompanied me on my inspection 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-sprayhead reciprocating booth and oven coating line	1004-90H	C
6	FGWOODWORKING	Wood component preparation with 3 particulate collector systems	Rule 285(l)(vi)(B)	C
7	FGFACILITY	All EUs at the facility including EUBOOTH1A, EUBOOTH1B, EUBOOTH2 and EUBOOTH4	1004-90H	C

1 & 2. EUBOOTH1A & EUBOOTH1B

Both booths were in operation. Mat type paper over spray filters were identified in each booth. Overspray filters are changed out weekly.

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. Sandy stated that she verifies each value in the spreadsheet against current MSDS about once a year. Upgrades to the spreadsheet are made by Todd Snarr of ELM Consulting. PTI 1004-90H does not require logging hours of operation; however Pioneer continues to collect the data.

HVLP guns are in use. C. Fackler was unaware of the test cap requirement; however records indicate that the test cap gauges have been identified at this facility in the past. I explained that tip pressure of HVLP cannot exceed 10 psi. He will check into implementing a standard operating procedure. Records indicate that the HVLP guns at Pioneer normally operate in the of 7 to 8 psi range.

Pioneer Cabinetry 12 month period ending December 2013				
Booth	Hours	Gallons	Tons VOC & Acetone	Limit
EUBOOTH1A	2173	1710	4.33	24.3
EUBOOTH1B	2102	1777	4.63	10.5

All waste coatings and purge solvent are collected and distilled for reuse. Two 5 gallon Safety Kleen stills were identified. 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, except for the following.

EUBOOTH2 is not required to use HVLP spray technology. Pioneer is currently using air assisted airless spray technology.

Pioneer Cabinetry 12 month period ending December 2013				
Booth	Hours	Gallons	Tons VOC & Acetone	Limit
EUBOOTH2	2076	6023	12.38	29.3
EUBOOTH3	2261	23,614	9.67	24.1

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

See table above.

This line was in production through December 2013. It was recently decommissioned and was not in use during my inspection. Records indicated that it was operated in compliance with the previous version of PTI 1004-90.

Most of the gallons on this line were applied as acetone.

5. EUBOOTH4

The Superfici/Binks Spray line and Lochinvar Oven have just been installed. 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.

The process was in operation during my inspection, but is still in the setup stage. Paint data is being collected, but a report has not been generated yet. A sample of the proposed data sheet was submitted to me. Assuming similar coatings used in EUBOOTH3 will be used in EUBOOTH4, records indicate that the highest #VOC/gal coating used is a varnish at 4.65 #VOC/gal.. This satisfies the sealer/topcoat limit of 4.8 #VOC/gal minus water.

A 500,000 btu/hr Lochinvar natural gas "boiler" is used to supply heat to the oven.

I spent some time after the inspection discussing the current and proposed recordkeeping with Sandra Townsend, Purchasing Supervisor and Chad Fackler. S. Townsend uses MSDS to update a spreadsheet developed by their consultant Todd Snarr. The spread sheet generates the calculations required by the permit. They are presently keeping daily use records for the new coating line, but S. Townsend would like to be able to continue using the weekly inventory data that they use for the other lines. All of their current compliance checks are based on monthly 12-month rolling value. With the inventory approach, one employee has responsibility for collecting coating use data. S. Townsend feels that this helps to eliminate employee error. Condition VI.3 requires a calendar day basis.

I suggested that an administrative change could be made to the permit allowing weekly records. This is what is required for FGFACILITY and the other EU's identified in the permit. A request would have to be made to the permit unit.

6. FGWOODWORKING

Three separate collection systems were originally permitted under PTI #1005-90. This permit has since been voided because the equipment is exempted by Rule 285(l)(vi)(B). The units exhaust into the in-plant environment. The controls are used to capture sawdust from carving, cutting, sawing, routing, drilling, sanding, and other wood machining operations. The collected materials are reused as animal bedding.

7. 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 2013			
Pollutant	Reported	Limit	Unit
VOC + acetone	31.1	90.0	Ton/year

formaldehyde	0.002	0.2	Ton/year
Individual HAP (xylene)	0.5	9.0	Ton/year
Aggregate HAP	0.8	22.5	Ton/year

I left the facility at 11:30 am.

NAME *Ben Miller*

DATE 3-18-2014

SUPERVISOR *M. Miller*