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MAWIA

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

P086945182

FACILITY: Plymouth Furniture Refinishing		SRN / ID: P0869
LOCATION: 9173 General Court, PLYMOUTH		DISTRICT: Detroit
CITY: PLYMOUTH		COUNTY: WAYNE
CONTACT: Sandy Fatt , Owner		ACTIVITY DATE: 07/13/2018
STAFF: Stephen Weis	COMPLIANCE STATUS: Compliance	SOURCE CLASS: Minor
SUBJECT: Compliance inspection of the Plymouth Furniture Refinishing facility in Plymouth. The Plymouth Furniture Refinishing facility is scheduled for inspection in FY 2018.		
RESOLVED COMPLAINTS:		

Location:

Plymouth Furniture Refinishing
(SRN P0869)
9173 General Court
Plymouth 48170

Date of Activity:

Friday, July 13, 2018

Personnel Present:

Steve Weis, DEQ-AQD Detroit Office
Sandy Fatt, Owner, Plymouth Furniture Refinishing

Purpose of Activity

A self-initiated inspection of the Plymouth Furniture Refinishing facility (hereinafter "Plymouth Furniture") in Plymouth was conducted on Friday, July 13, 2018. The Plymouth Furniture facility was on my list of sources targeted for an inspection during FY 2018. The purpose of this inspection was to determine compliance of operations at the Plymouth Furniture facility with applicable rules, regulations and standards as promulgated by Public Act 451 of 1994 (NREPA, Part 55 Air Pollution Control), and with applicable Federal standards. The facility is not currently subject to any DEQ-AQD permits.

Facility Site Description

The Plymouth Furniture facility occupies a suite in a commercial/light-industrial building on General Court in Plymouth. General Court is located in a complex of commercial/industrial properties that stretches along General Drive between Joy and Ann Arbor Roads, east of Lilley Road. General Court runs west off of General Drive approximately ¼ mile north of Joy Road. The Plymouth Furniture facility occupies the second westernmost suite of a building that is located in the northwest quadrant of General Court.

The properties in the immediate vicinity of the Plymouth Furniture facility contain a mix of businesses, ranging from a towing company to a fitness studio. The Sun Coating Company facility (42105 Postiff, SRN N0266) is located about 150 yards to the north of Plymouth Furniture. Several of the suites in the building in which Plymouth Furniture is located, as well as the adjacent building, are currently vacant. The area to the east of the facility consists of commercial and light industrial properties up to and past the CSX railroad right of way. In terms of residential areas, the Plymouth Manor Apartments complex is located directly to the west of the facility; the property line is about 30 feet from the building in which the facility is located.

The Plymouth Furniture facility was formerly located at 331 North Main Street in Plymouth, doing business at that location for over 38 years. The business moved to the current location on General Court in February of 2016. An article about the company and its move to their current location is attached to this report for reference.

Facility Operations

Plymouth Furniture Refinishing restores and repairs furniture and other wood fixtures, such as antique radios and clocks, and wood doors. The company is also a distributor of naked/unfinished furniture that is crafted by Whitewood Furniture, based out of Thomasville, North Carolina. The company's website (www.plymouthfurniturerefinish.com), as well as a brochure advertising the company's services, presents the following among the services that the company provides: all wood repairs, total furniture restoration, regluing and re-venering, furniture recanting, antique radio cabinet refinishing, kitchen cabinet repair and refinishing, and in-home touch ups. A copy of the company's brochure is attached to this report for reference. The facility operates as a non-production facility – all of the work that takes place at the facility is repair work for customers.

The building in which the company operates is a roughly 19,500 square foot building that is divided into 6 suites. Plymouth Furniture occupies the second westernmost suite in the building. The facility consists of an office and conference room area in the front, and the majority of the space is the work area, which is accessible via the office area, a bay door that faces the front of the building, and an access door at the rear of the suite. Much of the shop area is a work area in which items that have been brought to the facility are staged for whatever repairs need to be made to them, ranging from repairs and touch-ups to sanding and stripping the existing coatings from an item and recoating it. A paint booth was installed when the company moved to this location, and it serves to allow employees a place to coat or re-coat items that has ventilation. The booth is located in the southwest (or rear-right) corner of the building, and it is equipped with filters on the side walls, and the inside of the door. Air from the booth is drawn through the side filters and exhausted to the ambient air via a small stack on the roof. Lacquer-based paints are applied to items in the booth.

The facility is open Monday through Friday from 8:30am through 5pm, and on Saturdays from 10am through 1pm. I was told that there are currently two full time employees and two part time employees.

Inspection Narrative

I arrived at the facility at 1:25pm. I entered the main entrance, and I was met by the facility owner, Sandy Fatt. I introduced myself, and I stated the intention of my visit to the facility.

Sandy began by explaining and showing me what the facility does. The office and lobby areas had many items on display, ranging from furniture and other wood items that had been restored, to items that had not yet been restored. Sandy also showed me some of the unfinished furniture that Plymouth Furniture sells.

We proceeded to walk through the shop area of the facility. There were many items located in the plant area that were in various stages of the restoration/repair process. We walked to the back of the shop area, and Sandy pointed out the paint booth. The unit was not in use, so we opened the door and looked inside the unit. Sandy and one of the facility employees explained the use of the booth. They told me that lacquer-based paint is applied to items in the booth. They pointed out the filters in the booth, and we walked outside via the back door to look at the stack for the booth. I saw some drums of a material labeled as being from Chemical Solvents, Inc. I inquired about this material, and I was told this is the stripper that is used to remove paint and coatings from items that need to have coating removed. I asked if the stripper material contained methylene chloride. The employee stated that it did not; he said that the facility uses a material with a lower amount of solvents in it to be safer.

Sandy and I returned to the office area of the facility. I asked her how the facility tracks the usage of material, specifically coatings and stains/lacquers, that are used at the facility. I provided her with a copy of the DEQ-AQD "Rule 287(2)(c) Permit to Install Exemption Record: Surface Coating Equipment" form and information. I pointed out the criteria for the Rule 287(2)(c) exemption, and I showed Sandy the example recordkeeping form. Sandy told me that the facility does not track monthly records, as most of the material that is used at the facility is hand-applied using brushes and wipe cloths. She showed me her accounting spreadsheets through which the company tracks the amount of material that it purchases. Sandy told me that this information is strictly monitored as some of the coatings are expensive – the lacquer-based paint costs close to \$100 per gallon. Sandy show me the purchase records for 2017. In 2017, the facility purchased 5 gallons of the lacquer-based paint over the course of the entire year, and the facility spent \$853 on all coatings. Sandy explained that a little bit of coating goes a long way as not much is used to coat an item. Sandy said that she will continue to track the amount of coating material that is purchased by the facility and maintain the records.

After a brief conversation with Sandy to summarize the site visit, I left the facility at 2:15pm.

Permits/Regulations/Orders/Other

Permits

There are no active permits for the Plymouth Furniture facility. The facility does not currently have any boilers; building heating and cooling is provided by a HVAC system, which is exempt from DEQ-AQD permitting requirements.

The operations associated with the business of the company appear to be exempt from permitting requirements. The equipment that is used to sand and/or prepare the surface of items that are being repaired/restored at the facility meets the exemption criteria put forth in Michigan Administrative Rule 285(l)(iv), as the equipment is used on a non-production basis, and any emissions from these operations are vented to the in-plant environment. The coating of items appears to meet the exemption criteria in Rule 287(2)(c). Rule 103(k) defines a coating line as:

“...an operation which is a single series in a coating process and which is comprised of 1 or more coating applicators and any associated flash-off areas, drying areas, and ovens wherein 1 or more surface coatings are applied and subsequently dried or cured.”

Per this definition, each coating station at the Plymouth Furniture facility can be considered as a coating line. Rule 287(2)(c) exempts coating lines that: (i) use not more than 200 gallons of coating, as applied minus water, per month; (ii) any exhaust system serving only coating spray equipment are equipped with a dry filter control or water wash control that is installed, maintained and operated in accordance with manufacturer's specifications; (iii) monthly coating records are maintained on file for the most recent two year period. During the site visit, the facility owner, Sandy, showed me the accounting spreadsheets that are kept to track the amount of coatings that are purchased. Recall from the discussion in the last section of this report that the amount of coating that was purchased for use in the booth was around 5 gallons for all of 2017. I was shown purchase records for other types of coatings used at the facility which showed a similar low usage volume. The facility should be well under the 200 gallon per month exemption limit. The plant area is not vented to the ambient air, but the paint booth is vented. The booth is equipped with dry filters. Regarding coating usage records, the facility was provided with the Rule 287(2)(c) guidance material, which includes a sample material tracking log sheet. The facility does maintain records of the amount of each coating material that is purchased, including the date of purchase.

Regulations

Facility operations were checked against Federal regulations. There are no New Source Performance Standards under 40 CFR Part 60 that apply to the operations at the facility. Among the National Emission Standards for Hazardous Air Pollutants (NESHAP) under 40 CFR Part 63, one the potentially applied in Subpart HHHHHH (NESHAP for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources). The applicability criteria in 40 CFR 63.11169 and 63.11170 put forth that a facility is subject to the requirements of this Subpart if the facility is involved with paint stripping activities that involve the use of chemical strippers that contain methylene chloride; autobody refinishing operations that encompass motor vehicle and mobile equipment spray-applied surface coating operations; or spray application of coatings containing compounds of chromium, lead, manganese, nickel or cadmium to any part or product made of metal or plastic.

While Plymouth Furniture does strip coatings from items that they are refinishing/restoring, I was told that the facility does not use strippers that contain methylene chloride. The facility seems to primarily work on wood items, but the company website includes metal stripping and painting as one of the services that they offer to customers. The regulation applies to spray-applied coating operations. Subpart HHHHHH defines spray-applied coating operations as coatings that are applied using a hand-held device that creates an atomized list of coating, which is deposited on a substrate. The definition exempts certain materials and activities from the definition of spray-applied coating operations, including surface coating application using hand-held non-refillable aerosol containers, non-atomizing application technology (which includes paint brushes, rollers, hand wiping, flowcoating, dip coating, electrodeposition coating, web coating, coil coating, touch-up markers, or marking pens), and coatings applied from a hand-held device with a paint cup capacity that is equal to or less than 3 fluid ounces. Aside from the paint booth, which seems dedicated to coating wood items, the coatings at the facility are hand applied (hand wiping, aerosol containers). The requirements of Subpart HHHHHH do not appear to apply to the operations at Plymouth Furniture.

Compliance Determination

Based upon the results of the July 13, 2018 site visit, the Plymouth Furniture Refinishing facility in Plymouth appears to be **in compliance** with applicable rules and regulations.

Attachments to this report: a company brochure that describes the type of work that is done at the Plymouth Furniture facility; a copy of an article about the company and its move to their current location; a copy of DEQ-AQD's Rule 287(2)(c) exemption record form.

NAME Steve Wens

DATE 2/26/19

SUPERVISOR JK