

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Self Initiated InspectionN0938  
FY 2015 Insp.

N093830174

FACILITY: OLD WORLD REFINISHING LTD	SRN / ID: N0938
LOCATION: 32726 W EIGHT MILE RD, FARMINGTON	DISTRICT: Southeast Michigan
CITY: FARMINGTON	COUNTY: OAKLAND
CONTACT: Steve Szuba, President and Owner	ACTIVITY DATE: 06/19/2015
STAFF: Iranna Konanahalli	SOURCE CLASS: MINOR
COMPLIANCE STATUS: Compliance	
SUBJECT: FY 2015 inspection of Old World Refinishing, Ltd. ("Old World")	
RESOLVED COMPLAINTS:	

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Old World Refinishing, Ltd. (N0938)  
32726 West Eight Mile Road  
Farmington, Michigan 48336-

Phone: 248-471-1017

VN: AQD issued Violation Notice dated June 22, 2010, for Rule 336.1201 (Methylene Chloride paint stripper), 336.1910

Not subject (after July 2010) to NESHAP / MACT 6H: 40 CFR Part 63, Subpart 6H, National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, Page 1738, Federal Register / Vol. 73, No. 6 / Wednesday, January 9, 2008 / Rules and Regulations / Final rule. After June 22, 2010, VN, Old World replaced HAP solvent, Methylene Chloride (CAS 75-09-2), with a non-HAP paint stripper.

On June 19, 2015, I conducted a level 2 self-initiated inspection of Old World Refinishing, Ltd. ("Old World") located at 32726 West Eight Mile Road, Farmington, Michigan 48336. The inspection was conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451 and Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) administrative rules

During the inspection, Mr. Steve Szuba (Phone: 248-471-1017; E-mail: OWRLTD@aol.com), President and Owner, assisted me.

Old World is in the business of repairing and restoring antique / old furniture. Mr. Szuba stated that Old World never used methylene chloride after resolving 2010 Violation Notice.

**8 ft \* 8 ft Spray Booth.**

One 8 ft wide x 8 ft deep x 10 ft tall paint spray both equipped with a back-draft dry filter system is present. During the May 2010 inspection, I observed that the dry filters were not installed properly. There were lots of holes in the filter system. The system was not designed properly.

I asked Mr. Szuba to install the filters such that they fit, at all times, snugly without gaps and holes. I also asked him to keep records of paint / varnish and solvent usage. The paint, varnish, stain and solvent usage records were not available. The usage is much less than 200 gallons per month (5-10 gal/mo).

In CY 2010, the filter system was redesigned to resolve 2010 VN. During FY 2015 inspection, the filter system was installed and operating properly. The dry filter system was installed snug and tight without holes.

The booth was redesigned as result of June 22, 2010, Violation Notice that the dry filter system was inadequate.

The booth is exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.287(c).

**5 ft \* 10 ft Paint Stripper**

In May 2010, Methylene Chloride (Dichloromethane) based solvent was used to strip paint / varnish / stain from old antique furniture. About 130 gallons per year MeCl was used during the 12-month period (FY 2010). Please refer to June 22, 2010 Violation Notice for additional details.

During FY2015 inspection, Mr. Szuba showed me new material that replaced MeCl based paint stripper. New material is non-halogenated organic solvent blend based upon MSDS. About 20 gallons of new solvent per month are used. From the stripping tank, solvent is collected by gravity flow in a pail. The collected solvent is pumped back to the stripper; i.e., the solvent is reused / recycled. Due to lower vapor pressure of new solvent as compared with methylene chloride, less solvent used

After the replacement of MeCl solvent (July 2010) with a non-MeCl solvent, Old World is not subject to NESHAP / MACT 6H (40 CFR Part 63. Subpart 6H, National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, Page 1738, Federal Register / Vol. 73, No. 6 / Wednesday, January 9, 2008 / Rules and Regulations / Final rule).

According to US EPA, the solvent stripper is not cold-cleaner because wood finish is not soil.

#### **New replacement solvent**

The stripper solvent is Benco #B20 Industrial Paint Remover (Benco, Inc. of Crossville, Tennessee; Phone: 931-484-9578). The stripper solvent is a blend of alcohols, ketones and aromatic hydrocarbons: methanol, acetone, methyl ethyl ketone (MEK), toluene, 2-butoxy ethanol and wetting agents.

97% VOC solvent. Flash Point (FP) = 15 °F COC. Boiling Point (BP) = 135 °F @ 760 mm Hg. Vapor Pressure (VP) = 300 mm Hg at 68 °F. Specific Gravity (SG, Water = 1.0) = 0.83. Density ( $\rho$ ) = 6.56 lbs. / gallon (0.83 kg / L) Flammability range = 3.13 %v (LEL) – X%v (UEL).

#### **Rule 285(I) wood cutting / grinding / saw machines**

One wood cutting machine is present. The machines are not equipped with a particulate matter control systems, i.e. a filter systems. Due low usage rate indoor air quality is not significantly impacted. There is no exhaust to outside ambient air.

The machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(I).

#### **MIOSHA inspection**

Based upon AQD's referral, Mr. James E. (Jim) Hensley (Ph: 517-242-5828; E-mail: [hensleyj1@michigan.gov](mailto:hensleyj1@michigan.gov)) of MIOSHA conducted an inspection after MeCl was replaced. Because Old World had already replaced methylene chloride with a VOC solvent, indoor air monitoring by MIOSHA showed no worker safety standards violation in connection with MeCl.

#### **Conclusion**

After June 22, 2010, VN, Old World replaced HAP solvent, Methylene Chloride (CAS 75-09-2), with a non-HAP paint stripper.

NAME J. L. Hannah DATE 07/13/2015 SUPERVISOR \_\_\_\_\_