DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

N748435600

FACILITY: PERSPECTIVES IN LAMINATE INC.		**SRN / ID:** N7484
LOCATION: 2720 W. 14 MILE RD., ROYAL OAK		**DISTRICT:** Southeast Michigan
CITY: ROYAL OAK		**COUNTY:** OAKLAND
CONTACT: Paul Drapinski , Production Foreman		**ACTIVITY DATE:** 07/19/2016
STAFF: Sebastian Kallumkal	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** Minor
SUBJECT: Onsite Inspection		
RESOLVED COMPLAINTS:		

On Tuesday, July 19, 2016, I conducted a self initiated inspection at Perspectives located at 2720 W. Fourteen Mile Road, Royal Oak, Michigan. Perspectives and Vogue Furniture share the same building, same address and the manufacturing shop. The purpose of the inspection was to determine compliance with the Federal Clean Air Act; and Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451.

I arrived at the facility about 9:45 AM. I met Mr. Paul Drapinski, Production Foreman. Mr. Jeff Morche, Previous contact person is not with the company any more. I introduced myself and stated the purpose of my visit. I provided him the "DEQ Environmental Inspections: Rights and Responsibilities" brochure. During the pre-inspection meeting, Mr. Drapinski explained to me the business and manufacturing operations at this facility.

"Perspectives" is in the business of custom cabinetry. They mainly manufacture kitchen, laundry room and bathroom cabinets. The process involves wood cutting, gluing, staining, painting (lacquer, polyurethane, top coat, conversion varnish, primer), lamination, etc. The facility has two dust collector baghouses to collect the dust from table saws, edge banders, shop saws, joiner (smoothing surfaces), planer (thinning), CNC operations, etc. used in the wood preparations. The exhausts from the baghouses are vented inside of the facility. This process is exempt from Permit To Install (Rule 201) requirements pursuant to Rule 285(l)(vi)(C). The saw dust from this baghouse is collected in a hopper and the hopper is emptied to a waste dumpster.

Mr. Drapinski accompanied me for an inspection of the facility. The facility has a paint spray booth, approved in 2007, located near the finishing area. The booth is used for spray lacquer, poly urethane, top coat, clear coat, conversion varnish, primer, etc. on to raw wood or MDF (medium density fiber) boards. Painter Mr. Greg Redzilowski explained to that the filters are replaced weekly if clear coat is applied or after every job if paint is applied. The coatings are received one gallon cans and the unused coatings after keeping for few weeks are put into waste drums and hauled offsite. Lacquer thinner is used for cleaning the guns. The waste solvent is hauled offsite. The exhaust filters looked not excessively dirty and in place.

The facility keeps weekly records of coatings used in the booth. The records show that in April 2016, the facility used 39 gallons of coatings. Based on the 2013, 2014, 2015 and 2016 records the monthly coating usage appears to be less than 200 gallons. The total coating usages for 2013, 2014 and 2015 were 370 gallons, 412 gallons, and 453 gallons respectively. The coating usage appears to be less than 200 gallons per month (minus water). The paint booth appears to be exempt from permit to install R336.1201 requirements pursuant to R336.1287(c). (See details of the rule below)

The wood is sanded and stain wiped prior to applying sealer and top coat. The dust from sanding operations is collected in through bags under the sanding tables and deposited to troughs beneath the bags. The dust is discarded into the dumpster. The staining and sanding is done in the finishing area. The records show that the facility uses between 1 to 4 gallons of stain every week. The coating usage appears to be less than 2 gallons per day. The process appears to be exempt from permit to install R336.1201 requirements pursuant to R336.1287(a). (See details of the rule below). The facility used about 120 gallons in 2013, 120 gallons in 2014, 123 gallons in 2015 and 68 gallons in 2016 as of July 11, 2016.

In the edge bander process the edge is glued to the boards using contact adhesive which are pallets bu melted before applying to the board. It is a hot melt adhesive process. The process appears to be exemp from permit to install R336.1201 requirements pursuant to R336.1287(i). (See details of the rule below)

The facility also has an area to apply contact adhesives (glue) to boards to laminate veneer. They use Lio Grip R5702011L, a non-flammable liquid as glue. The glue is sprayed from a pressure pot using guns. Th area is not considered a paint booth due to the lack of makeup air. The facility submitted adhesive usag records and Safety Data Sheet (SDS), via email on July 26, 2016. Based on the records, facility used 33 gallons in 2013, 350 gallons in 2014, 358 gallons in 2015 and 250 gallons purchased through June in 2016 The area is not vented to the atmosphere and emissions are released to the general in-plant area. The emai also stated that they use the adhesive on a regular basis so a good estimate would be that we use 30 gallon per month. The process appears to be exempt from permit to install R336.1201 requirements pursuant t R336.1287(a) because the daily usage of adhesive appears to be less than 2 gallons per day and th emissions are released to the general in-plant area. (See details of the rule below)

The submitted SDS shows that the contact adhesive, Lion Grip R5702011L (Company: Richelie Hardware, Ltd., Montreal, Quebec, H4S 1V4) contains about 70-90% methylene chloride (CAS No. 75092 with an initial screening level (ITSL) of 2000 µg/m^3(annual exposure) and an Initial Risk Screening Leve (IRSL) of 60 µg/m^3(annual exposure). The IRSL and ITSL are defined below. The facility is advised t reduce the concentration of methylene chloride in the general in-plant air, if needed, to decrease th employee health risk due to methylene chloride exposure. Facility may contact Michigan Occupationa Health and Safety (MI OSHA) Consultation, Education & Training (CET) at (517) 322 1809 to report thi issue and request their assistance in reducing the employee's exposure. The OSHA Rule related t Methylene Chloride exposure and brochure related to CET assistance is attached.

AQD informed Mr. Drapinski about this concern on July 28, 2016 and also forwarded the email fron MIOSHA which included the OSHA Rule related to Methylene Chloride exposure and brochure related t CET assistance. He agreed to follow up on the AQD concern.

R 336.1109 Definitions; I
Rule 109. As used in these rules:

(c) "Initial risk screening level" means the concentration of a possible, probable, or known human carcinogen in ambient air which has been calculated for regulatory purposes, according to the risk assessment procedures in R 336.1229(1), to produce an estimated upper-bound lifetime cancer risk of 1 in 1,000,000.

(d) "Initial threshold screening level" means a concentration of toxic air contaminant in the ambient air which is used to evaluate noncarcinogenic health effects from a proposed new or modified process and which is calculated, for regulatory purposes, according to the procedures in R 336.1229(2).

R 336.1287: Permit to install exemptions; surface coating equipment.

Rule 287: The requirement of R 336.1201(1) to obtain a permit to install does not apply to any o the following:

a) An adhesive coating line which has an application rate of less than 2 gallons per day an which has emissions that are released only into the general in-plant environment.

b) A surface coating process that uses only hand-held aerosol spray cans, including th puncturing and disposing of the spray cans.

c) A surface coating line if all of the following conditions are met:

i. The coating use rate is not more than 200 gallons, as applied, minus water, pe month.

ii. *Any exhaust system that serves only coating spray equipment is supplied with a properly installed and operating particulate control system.*

iii. *Monthly coating use records are maintained on file for the most recent 2-year period and are made available to the air quality division upon request.*

d) *A powder coating booth that has an appropriately designed and operated particulate control system and associated ovens.*

e) *A silkscreen process.*

f) *Replacement of water wash control in a paint spray booth with dry filter control.*

g) *Adding dry filters to paint spray booths.*

h) *Replacement of a coating applicator system with a coating applicator system that has an equivalent or higher design transfer efficiency, unless the change is specifically prohibited by a permit condition.*

i) *Equipment that is used for the application of a hot melt adhesive.*

j) *Portable equipment that is used for on-site nonproduction painting.*

k) *Mixing, blending, or metering operations associated with a surface coat*

Conclusion: Based on the inspection and records and reports review, the facility appears to be in compliance with applicable Air Quality Regulations. If the facility decided to vent the emissions from the adhesive coating application to the atmosphere, please contact MDEQ-AQD prior to the installation of the booth to inquire about the air quality permit applicability. Emails, usage records and SDS are attached for review.

NAME Sebastian Kallumkal DATE 7/29/2016 SUPERVISOR CJE