

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

N672728194

FACILITY: Multi Packaging Solutions		SRN / ID: N6727
LOCATION: 504 Eastern Avenue, ALLEGAN		DISTRICT: Kalamazoo
CITY: ALLEGAN		COUNTY: ALLEGAN
CONTACT: Herbert DeKoff, Technical Services Manager		ACTIVITY DATE: 12/03/2014
STAFF: Dale Turton	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT:		
RESOLVED COMPLAINTS:		

This company prints the cartons and labels needed to package the products made by the adjacently located Perrigo Company. Most of the facility is covered under Permit to Install #225-05D. Two additional presses, not included in the permit, are covered under the Rule 290 exemption. The facility is a true minor for VOCs since they have taken a 22.5 ton permit limit, in addition to the maximum 12 tons per year for the two exempt presses. Added up, this is below the major source threshold for VOC's (100 tons).

In addition to Herb DeKoff, Dave Cook assisted in the inspection.

Flexographic Presses

Six flexographic printing presses are used to print labels. Label Press #2 and Label Press #9 share a common exhaust, except when #9 is using UV inks when it uses a separate exhaust. Label Press #3 and Label Press #8 share a common exhaust. Presses 2, 3, 8, and 9 are included in the permit.

New Label Press #10 and Label Press #11 are the newest presses that were installed using the Rule 290 exemption. Both of those have their own stack. Presses #1, #6, and #7, all still listed on the permit, have been removed from the facility.

Carton Press #1, Carton Press #2, and Carton Press #3 are used to print the paperboard cartons. Each press has its own stack. There have been no significant changes to this area since at least 2011.

A variety of water based and UV inks are used on the presses. Condition II.1 of the permit refers to the flexographic printing presses portion of the operations. The material limit is a BACT limit that was derived from Rule 624. A review of the manufacture's data shows that none of the inks or varnishes exceeds a VOC content of 25% by volume of the total volatile portion by volume of the inks. One of the additives is higher than 25% but the "as applied" percent of VOC for the inks is still well under the limit. Therefore they all comply with the condition.

Folder/Gluer

Folder/Gluer #1 & Folder/Gluer #2 use a low VOC adhesive. These are not exhausted outdoors. The small amount of VOC emissions are emitted into the room. There have been no significant changes to this area since at least 2011.

Plate Making

The Plate Making operation is housed in a separate room. A plate goes through 5 stages to make it ready for the press. These stages are: Pre Expose, Engrave, Expose, Wash Out, and Drying. There is also a still in the room to recover used solvent. The exposure/washout/drying machine has a separate vent for the solvent and the heater. The room has floor sweeps to pull the fugitive vapors from the room. The still and the two west wall floor sweeps are combined above the ceiling into one exhaust at the roof level. The solvent washout unit, exposure dryer unit, north wall floor sweep, and the south wall floor sweep are combined above the ceiling into one exhaust at the roof level. The company uses "Solvit" (100% VOC) in the plate room. This solvent contributes about half of the total VOC emissions from the facility.

Dust Collection

The dusts generated from various points throughout the plant are all ducted to a dust collector system. A cyclone first removes the larger pieces, then the dust is filtered in a Torit cartridge filter, then the air is sent through a HEPA filter. The resulting cleaned air is exhausted back into the plant year-round.

#### Recordkeeping

The company keeps a spreadsheet to keep records of the material usage and VOC emission calculations on a monthly and 12 month rolling basis. The spreadsheet also is used to track the estimated VOC emissions from the Rule 290 presses. AQD staff has given permission for the company to use manufacturer's formulation data instead of Method 24 testing (Condition V). The recordkeeping also tracks HAPs and Acetone emissions.

Actual emissions of VOC's that were reported in the 2013 MAERS report were 6.34 tons. There were no HAPS used in the plant for the year. The emissions of acetone were 0.05 tons, less than the allowed 4.5 tons.

#### Stacks

The stacks are not labeled at the roof level. It is difficult to determine what stacks are associated with what equipment in the plant. It is recommended that the stacks be labeled so that they can be easily identified when on the roof.

NAME Dale Turton

DATE Jan 6, 2015 SUPERVISOR MA 1/6/2015