

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

N521443874

<b>FACILITY:</b> Multi Packaging Solutions		<b>SRN / ID:</b> N5214
<b>LOCATION:</b> 13 W 4TH ST, HOLLAND		<b>DISTRICT:</b> Grand Rapids
<b>CITY:</b> HOLLAND		<b>COUNTY:</b> OTTAWA
<b>CONTACT:</b> Brian Angell, QA Manager		<b>ACTIVITY DATE:</b> 03/19/2018
<b>STAFF:</b> Tyler Salamasick	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> Opt out source inspection FY2018		
<b>RESOLVED COMPLAINTS:</b>		

### Background

Multi Packaging Solutions (MPS) SRN: N5214 is a package manufacturing facility that specializes in folding, die cutting and printing packaging primarily for over-the-counter medication. The production facility is located at 13 W 4<sup>th</sup> Street, Holland, Michigan 49423. MPS is located in a primarily industrial area with a commercial area located approximately 500 feet south of the facility. The facility was inspected on 3/19/2018 by Tyler Salamasick, Environmental Quality Analyst of the Michigan Department of Environmental Quality, Air Quality Division. The purpose of the inspection was to determine the facility's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and PTI No. 101-17 (the permit). Multi Packaging Solutions is an opt out source for hazardous air pollutants (HAPs). PTI No. 101-17 establishes a HAPs limit at the facility with a facility wide (FG-Facility) aggregate HAP limit of 22.4 tons per year (tpy) and a single HAP limit of 8.9 tpy. The permit also established a 34.8 tpy VOC limit for the ink labelers, printers, presses and die cutters. These emission units are limited under a flexible group called FG-PrintingPakMfg.

### Inspection

Site arrival was Monday morning on 3/19/18. Upon entry I met with QA Manager, Brian Angell. I presented my State of Michigan identification card, informed the facility representative of the intent of my inspection and was permitted onto the site. Brian showed me the facility. Prior to inspecting the production area, Brian and I discussed the facility's processes and the permit. I also asked if there had been any changes in the process since the facility was last inspected. Brian told me that they had replace an old folder gluer and had performed a meaningful change demonstrating. I did not request a record of the facility's meaningful change demonstration. Brian also informed me that it was likely that Multi Packaging Solutions would be hiring a new environmental contact and Brian would likely no longer be responsible for environmental compliance.

### Facility processes

MPS makes packaging for various products. The process starts at the shipping and receiving area. MPS receives blank stocks of paperboard. The paperboard is stationed at one of the four printing presses. The printing presses are referred to in the permit as EU-Press-01, EU-Press-02, EU-Press-03 and EU-Press-04. Individual sheets of paperboard are sent through the printing press where a colored coating is applied. As the paper moves through the process, various colored coatings are added at each step. EU-Press-03 uses aqueous coating and UV coatings. This is tracked separately in the permit as EUCURE140 LVTR. Once all of the coatings are added, the color is sealed into the paperboard and the paper is dried and stacked. The driers associated with the presses have external vents connected to them. The permit requires that the presses are not vented to the outside air. There is discussion (see attached) from the MDEQ permit section that states that the driers are not associated with the presses as they are not expected to release air emissions.

The coated paper is then sent through a die cutting station. MPS has four die cutters. They are referred to in the permit as EU-DieCutter-01, EU-DieCutter-02, EU-DieCutter-03 and EU-DieCutter-04. The die cutters cut the paper and workers remove the excess. The cut sheets are then sent to folding and gluing station. Some of the packaging materials also go through the digital print area.

The digital print area has two printers referred to in the permit as EU-Digital-01 and EU-Digital-02. The printers are used to print numbers or codes onto packaging. The printers are vented into the in-plant air.

The last step of the process is folding and gluing. The printed and cut paperboard is loaded into the folding and gluing machine. The paperboard passes down the line where it is folded and glue is applied. The facility has four gluers referred to in the permit as EU-Folder-Gluer-01, EU-Folder-Gluer-02, EU-Folder-Gluer-03 and EU-Folder-Gluer-04. Once glued the products are finished and they are packed for shipping.

Permit conditions for flexible group FG-PrintingPakMfg

The following conditions apply to EU-Press-01, EU-Press-02, EU-Press-03, EU-Press-04, EU-Digital-01, EU-Digital-02, EU-DieCutter-01, EU-DieCutter-02, EU-DieCutter-03, EU-DieCutter-04, EU-Folder-Gluer-01, EU-Folder-Gluer-02, EU-Folder-Gluer-03 and EU-Folder-Gluer-04.

PTI 101-17 limits the emissions of VOCs, VOC content of fountain solution, VOC content of glue, fountain solution usage and ECURE140 LVTR usage. The limits and highest usage since the permit issuance are listed in the table below.

<b>Pollutant</b>	<b>Limit</b>	<b>Highest Emission</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>
<b>1. VOCs</b>	<b>34.8 tpy</b>	<b>20.36 tpy in January of 2018</b>	<b>12-month rolling time period as determined at the end of each calendar month</b>	<b>FG-PrintingPakMfg</b>

Material limits

<b>Material</b>	<b>Limit</b>	<b>Highest emission</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>
<b>1. VOC Content of the Fountain Solution</b>	<b>5.0 % By weight, as applied</b>	<b>1.1 % by weight as applied</b>	<b>Instantaneous</b>	<b>EU-Press-01, EU-Press-02, EU-Press-03, EU-Press-04</b>
<b>2. VOC Content of</b>	<b>2.9 % By</b>	<b>0.3 % as</b>	<b>Instantaneous</b>	<b>EU-Folder-</b>

Glue	weight, as applied	calculated in the SDS		Gluer-01, EU-Folder- Gluer-02, EU-Folder- Gluer-03, EU-Folder- Gluer-04
3. Fountain Solution	1,400 lbs per month	946 lbs in November of 2017	Monthly	FG-PrintingPakMfg
4. ECURE140 LVTR	7,500 lbs per month	2890 lbs in January of 2018	Monthly	EU-Press-03

MPS has process and operational restrictions set by the permit. The permit requires that MPS stores all VOC-containing inks, fountain solution, coatings, cleaning solvents such as blanket and roller washes and used shop towels in closed containers and that they disposed of them in an acceptable manner, in compliance with all applicable state rules and federal regulations. I observed that most of the containers were closed and the materials appeared to be handled appropriately. The area was clean and relatively free of odors. I did observe a few containers that were partially used and left open. I informed Brian that these containers should be sealed when not in use.

The permit requires that all of the cleaning solvents have VOC composite partial vapor pressures that do not exceed 10 mmHg @ 20°C. Brian provided me with an SDS that indicated the cleaning primary cleaning solvent (Bottcherin Aquilo) had a vapor pressure of 0.1 KPa at 20°C (or 0.75 mmHg 20°C). This is below the limit established by the permit.

The permittee is required to verify the VOC content of any ink, coating and fountain solution as received and as applied, using federal Reference Test Method 24 or 24A pursuant to Rule 1040(5). The permittee is also permitted to use VOC content as determined from manufacturer's formulation data upon prior written approval by the AQD District Supervisor. The MDEQ AQD has approved the usage of manufacturer's formulation data as an appropriate method of determining the VOC content.

Permit conditions for FG-Facility (source wide)

The following conditions apply to all process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment. FG-Facility establishes individual HAP limits at 8.9 tons per year. The permit also limits aggregate HAP emissions to 22.4 tons per year. The limits and highest usage since the permit issuance are listed in the table below. The records provided were well organized and appeared to include all required information except a 12-month rolling total for aggregate HAPs. The facility's record instead provided at yearly emission total for HAPs. All of the information needed to calculate a 12-month rolling total is in the record. I used the available information to calculate the rolling 12-month total for aggregate HAPs which is included below in the table.

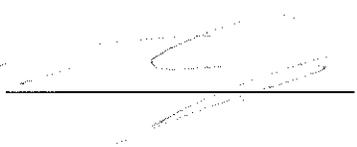
Pollutant	Limit	Highest emission	Time Period/	Equipment
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			Operating Scenario	
1. Each Individual HAP	8.9 tpy	Glycol ethers 4.8 tpy November 2017	12-month rolling time period as determined at the end of each calendar month	FG-Facility
2. Aggregate HAPs	22.4 tpy	5.08 tpy November 2017	12-month rolling time period as determined at the end of each calendar month	FG-Facility

FG-Facility does not have material limits, process and operational restrictions or design/equipment parameters.

**Conclusion**

It appears that Multi Packaging Solutions in compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and PTI No. 101-17. MPS should add a 12-month rolling aggregate HAPs emission total in their emission report.

NAME       DATE 3/30/18      SUPERVISOR 