

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

N353130649

FACILITY: JOHN HENRY CO, THE		SRN / ID: N3531
LOCATION: 5800 W GRAND RIVER AVENUE, LANSING		DISTRICT: Lansing
CITY: LANSING		COUNTY: CLINTON
CONTACT: Tom Starin , Environmental & Safety Manager		ACTIVITY DATE: 07/08/2015
STAFF: Michelle Luplow	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Unannounced, schedule compliance PCE, as part of an FCE.		
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow

Personnel Present: Tom Starin (tom.starin@multiplkg.com), Environmental Health and Safety Manager

Purpose: Conduct an unannounced, scheduled, partial compliance evaluation (PCE) inspection by determining compliance with Multi Packaging Solutions' (John Henry Co.) Permit No. 424-97E, including verification that Multi Packaging Solutions (MPS) stayed within the permit's emission limits to remain an opt-out source and not enter into Title V status. This inspection was done as part of a full compliance evaluation (FCE).

Facility Background/Regulatory Overview: MPS is involved with printing predominantly floral paper products and packaging, which includes printing, cutting and/or applying adhesive to envelopes, boxes, etc.

MPS is an opt-out facility. VOCs are limited to various rates, depending on the process. During the 2013 inspection, S. Evans said that MPS' potential to emit for HAPS does not meet or exceed the major source threshold and therefore MPS does not have opt-out HAP limits contained in their permit. During this inspection I asked T. Starin to do a Potential to Emit for HAPs. I will be working with him in the future to make this determination.

T. Starin provided me with current equipment listing (see attached). The yellow highlighted equipment identifies new equipment that is currently being operated under exemption Rule 287(c) that will be added to a future permit to install modification for John Henry's current permit; the green highlighted equipment is equipment that has not been installed/has just been ordered and is proposed for installation. T. Starin informed me that they currently are working on a PTI modification application to include these units into their existing permit. Table 1 lists all units that MPS is currently operating under Rule 287(c).

Currently MPS is operating 6 emission units under exemption 287(c): EU-Packaging-25, EU-Packaging-26, EU-Packaging-27, EU-Digital-08, EU-Digital-09, and EU-Digital-10. To be exempt, MPS must keep monthly coating use records and stay at or below 200 gallons of coating (minus water) per month. See Table 1 for the highest coating usage rates between March 2013 and June 2015 for each unit.

Table 1. Exempt emission usage rates

Emission Unit	Installation Date	Highest Usage Rate (gal/month minus water)	Compliance Status
EU-Packaging-25	December 2013	125.2 (April 2014)	Compliance
EU-Packaging-26	June 2013	353.3 (October 2013)	Non Compliance
EU-Packaging-27	July 2013	125.9 (August 2014)	Compliance
EU-Digital-10	March 2013	16.2 (June 2015)	Compliance
EU-Digital-09	October 2014	114.8 (April 2015)	Compliance
EU-Digital-08	December 2013	54.2 (June 2015)	Compliance

At the time of the inspection the gallons used per unit had not been calculated. Within the recommended timeframe that I gave MPS to prove they met the exemption criteria, T. Starin provided me with the coating usage rates (minus water) for each unit. As seen in Table 1, EU-Packaging-26 exceeded the 200 gallon limit provided in Rule 287(c). Other than October 2013, MPS also exceeded the exemption limit on December 2013 (231 gallons), April 2014 (307 gallons), and August 2014 (350 gallons). At this time MPS does not meet the permit to install exemption requirements for EU-Packaging-26 and a violation will be sent for operating an emission unit without a permit to install.

MPS also operates emission units under 287(a) for coating adhesives. Table 2 lists the adhesive coating units. T. Starin said, and we spoke with the units' operator, that each unit uses only 1 quart of adhesive a day, or approximately 5 gallons every 2 weeks. MPS is meeting the 287(a) coating restrictions at this time.

Table 2. Rule 287(a) adhesive coating usage

Emission Unit	Usage (quarts per day)	Comments

Bunch Collator (business forms)		Included in EUFORMS 05-07 under PTI 424-97E
Magnum Collator (business forms)		Included in EUFORMS 05-07 under PTI 424-97E
Web-Klect Collator (business forms)		Included in EUFORMS 05-07 under PTI 424-97E
Rotoflex-Vericut (digital print center)		Removed
Kansa-Padder (finishing)	1	
Insert folders (packaging inserts)	1	

MPS has a total of 8 cold cleaners/parts washers onsite. During the inspection I noted where covers of the cold cleaners were not being utilized and where operating instructions needed to be posted, and made T. Starin aware of both. All cold cleaners meet the PTI exemption Rule 281(h) of an air:vapor interface of 10 ft² or less.

Emission Unit	Air:Vapor Interface 10 ft ² or less	Solvent Used	Cover closed?	Operating Instructions?	Comment
Two Indigo 6-gallon parts washer (digital print center 6600)	2.5'x1.5' = 3.75 ft ² each	Imaging Oil	No cover	Yes	Mentioned to T. Starin that there must be covers for these units. Will verify this was corrected in future inspection
15 gallon parts washer (maintenance)	3.5'x2' = 7 ft ²	Agitane M2062	Yes	Yes	
15 gallon parts washer (Multi)	3'x2' = 6 ft ²	Beaver S722	Yes	No	Provided T. Starin with the OEA-developed operating instructions sticker for cold cleaners.
6 gallon sonic anilox cleaner (packaging – carton)	3.5'x2.5' = 8.75 ft ²	Beaver S722	No Cover	No	Provided T. Starin with the OEA-developed operating instructions sticker for cold cleaners. Mentioned to T. Starin that these units should be covered. Will check for correction in future.
3 gallon sonic anilox Graymills cleaner (packaging – label)	3.5'x2.5' = 8.75 ft ²	Sonic Kleen (Corrosive)	No Cover	No	Provided T. Starin with the OEA-developed operating instructions sticker for cold cleaners.
25 gallons parts washer (packaging – label)	2.5'x4' = 10 ft ²	Beaver S722	No	Yes	Mentioned to T. Starin that the unit should be covered. Will check for correction in future.
6 gallon sonic anilox cleaner Graymills(digital center)	3.5'x2' = 7 ft ²	Imaging oil	Yes	Yes	

Inspection: At approximately 10:00 a.m. on July 8, 2015 I arrived at MPS and met with T. Starin. I gave T. Starin a DEQ "Environmental Inspections: Rights and Responsibilities" brochure during the 2013 inspection.

MPS has done an exceptional job of revising their emission calculation spreadsheets for the Monitoring/Recordkeeping requirements for each EU/FG. For each permitted emission unit, for all coatings used on that emission unit for the 12-month rolling period, MPS has a list of each coating's density, VOC content (with water), and the number of gallons or pounds of the coating that were used. This has made it easier to ask for specific SDS to verify that the VOC contents being reported in MPS' spreadsheets are accurate. These spreadsheets also contain the amount of material reclaimed. T. Starin said that for the INX coatings, they average the VOC content of all INX coatings for use in the VOC emissions calculations. I told him that MPS needs to be conservative with VOC content: they must use the highest VOC content for all INX coatings for use in the VOC calculations if they don't plan to use each INX coating individual VOC content to calculate emission. I will focus on this aspect of the emissions recordkeeping during a future inspection.

The "VOC Data" spreadsheets are created each month, which contain all coatings used for all permitted equipment. This sheet uses the gallons or pounds used, the VOC content, and the density to calculate the monthly VOC emissions in pounds. These monthly pounds are then entered into the "JH Annual Rolling VOC" spreadsheet for each respective emission unit. The "JH

Annual Rolling VOC" spreadsheet also calculates the 12-month rolling from each monthly entry for each permitted emission unit. See Table 1 for all actual emissions in comparison to MPS' permitted limits.

EU-PrePress-01

EU-PrePress-01 is a closed-loop still: solvent is reused. When solvent is added MPS includes it in their VOC records.

III. Process/Operational Restrictions

SC III.1 requires that all waste materials be captured and stored in closed containers and should be disposed of in an acceptable manner. I verified that the storage container for the still's waste was closed. It is also kept in a hazardous waste, flammable storage cabinet located next to the still. MPS is in compliance with SC III.1.

FG-PressRoom (EU PRESSROOM 01, 3) Sheetfed Litho – 2 units

III. Process/Operational Restrictions

I verified that the storage container for the lithographic press waste was closed. It is also kept in a hazardous waste, flammable storage cabinet located near the two presses. The waste is generated from cleaning of the press, "washup tanks" are used to collect the waste post-wash. Naptha and water are the cleaning ingredients. MPS is in compliance with SC III.1.

Applicable Conditions to all Emission Units/Flexible Groups

As seen in Table 3, MPS is in non-compliance with the monthly VOC emission limit for FG-Packaging. Based on the 12-month rolling records of June 2014 – May 2015, the monthly limit of 2000 lbs VOC has been exceeded several times: August 2014 (3,030 lbs), October 2014 (3,459 lbs), January 2015 (2,272 lbs), February 2015 (2,473 lbs), and April 2015 (2,107 lbs). Table 1 list the month with the highest exceedance in October 2014.

Table 4. VOC Emissions from all permitted equipment. See attached for actual 12-month rolling and monthly records (June 2014 – May 2015)

Emission Unit	Process Description	Actual Emissions (12-month rolling tpy)	Emission Limit (12-month rolling tpy)	Actual Emissions per calendar month (lbs)	Emission Limit per calendar month (lbs)	Compliance Status
EU-PrePress-01	This unit is a 100 gallon flex plate solvent still that is used continuously	2.9	5.3			Compliance
FG-PressRoom (EUPRESSROOM 01, 3) 2 units	Sheetfed Litho, 2 units. T. Starin said that the FG-PressRoom (offset/sheet fed printing) runs at least 5 days per week throughout the entire year.	(-1.08)	24.7			Compliance
FG-FMD-Multi (EU-FMD-Multi 01-04, 09, 15-17, 20, 22-24, 26, 29, 30) 15 units	Sheetfed Litho and Letterpresses. Multi 26 is offset digital printing that pulls off VOCs into a chiller and is vented outside through exhaust.	0.84	6.9			Compliance
FG-SLI (EU-SLI-01-05) 5 units	Rotary Letter Press (UV Cure ink only)	0.15	2.0			Compliance
FG-Packaging (EU-Packaging-02,09,11-16, 18-22, 24) 14 units	Carton and label printing, folding and gluing cartons. Only 1 color is printed at a time. T. Starin said that these presses run at least 5 days per	10.9	11.9	3,459 (October 2014)	2,000	Non-Compliance

	week throughout the whole year.					
FG-FMD-Envelope (EU-Envelope-01-04) 4 units	Envelope manufacturing: Printing, cutting, folding and gluing envelopes.	0.2	1.0			Compliance
FG-Digital (EU-Digital-01, 02, 04, 06, 07) 5 units	Label die cutting and coating, digital printed labels.	5.2	5.4			Compliance
FG-Forms (EU-Forms-01-07) 7 units	Lithographic printing, collating and gluing. Uses soy bean ink.	1.8	6.2			Compliance

III. Process/Operational Restrictions

MPS is required to capture all waste inks, coatings, fountain solutions, blanket wash/press wash or cleaning solvents, adhesives, ink-jet inks, makeup solvents, purge and clean-up solvents, etc and store them in closed containers that shall be disposed of in an acceptable manner. T. Starin said that the presses have automatic cleaning systems that dispense the used cleaning solvent into 1 gallon containers. These containers are emptied into the waste drum in the flammable cabinets approximately once per shift. T. Starin said that there is one waste container per ink color, and therefore a 6 color press would have 6 one-gallon containers. Once the waste containers of a particular process are full the operators of that particular process take the full drum to a staging area and then transported to a chemical storage shed (a remote location away from the facility). T. Starin said the waste in this area is then picked up every 25 – 40 days by the Environmental Recycling Group. This

information shows compliance with SC III.1 for all emission units/flexible groups, as acceptable capture, storage and disposal of waste solutions.

V. Testing/Sampling

T. Starin said that he contacted most of MPS's vendors who said that the VOC content is determined by manufacturer's formulations and/or Reference Test Method 24. The MSDS's themselves are used to report the VOC content. MPS is in compliance with SC V for all emission units and flexible groups.

Inspector's Safety and Health: Safety glasses.

Compliance statement: MPS (John Henry) is currently in non-compliance. A violation notice will be sent for failing to obtain a permit to install for EU-Packaging 26 (exceeding the Rule 287(c) exemption limit of 200 gal/month minus water). A violation notice will also be sent for exceeding the monthly emission limit of 2000 lbs VOC from FG-Packaging for August and October 2014; and January, February, and April 2015.

NAME

M. M. L. M.

DATE

9-26-15

SUPERVISOR

B. M.

