

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: On-site Inspection

P011173673

FACILITY: MCKAY PRESS INC		SRN / ID: P0111
LOCATION: 7600 WEST WACKERLY STREET, MIDLAND		DISTRICT: Bay City
CITY: MIDLAND		COUNTY: MIDLAND
CONTACT: Annette Murray , Director of Operations		ACTIVITY DATE: 07/23/2024
STAFF: Benjamin Witkopp	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Facility inspection		
RESOLVED COMPLAINTS:		

Ben Witkopp of the Michigan Department of Environment, Great Lakes, and Energy - Air Quality Division (EGLE-AQD) met with Annette Murray of McKay Press. Annette is the Director of Operations. The facility is in the printing industry and is part of RR Donnelly. It is engaged in printing quite a variety of products including mailers, brochures, sales display signs etc. The facility is covered by air use permit 107 -10. The permit involves a heatset press, three sheetfed presses, two ink jet printers, and a digital unit.

We discussed overall business outlook and current site operations. The heat set press has been removed from the facility due to continued low demand.

There is a flexible group (FG) FGsheetfed limit for three sheet fed presses (2 Komori and one envelope jet press, also known as Halm jet press). The VOC content of the fountain solution is required to be less than 5% by weight and the FG has a limit of 16 tons on a 12 month rolling time period. These presses have a requirement for vapor pressure of cleaning solvents to be less than 10 mm of mercury. A compliant material is used whose vapor pressure is 2.8 mm mercury. The flexible group has a VOC limit of 16 tpy on a 12 month rolling time period. The fountain solution has a VOC content limit of less than 5% by weight.

A flexible group called FGprinters consists of inkjet 1, inkjet 2, and a digital unit. Inkjet 1 is gone. Inkjet 2 has been converted to a cartridge unit. The digital unit remains intact. The flexible group has a VOC limit of 3.05 tpy on a 12 month rolling time period.

Lastly, there is a flexible group FGfacility which has limits concerning hazardous air pollutants (HAPs). The limits are less than 9.0 tpy for each individual HAP and less than 22.5 tpy for aggregate HAPs. The limits are based on a 12 month rolling time period.

We discussed the ebbs and flows in demand in the printing business. Through these discussions it was determined that 2022 would be the highest production and therefore emissions. Records were requested to be provided via email.

The company has 2 presses beyond those found in the permit. One is the Heidelberg and the other is a larger format VUTECH LX3 Pro. The presses are for specialty jobs and therefore low use. They use rule 287 c (surface coating use up to 200 gallons per month) as an exemption. It should be noted that in the AQD rules, the definition for surface coating includes ink. All other printers in the facility run on cartridges and could be thought of as larger scale office copiers / printers.

The records provided by Annette were sent via email and reviewed. Though the 12 month rolling time period records are truly being calculated correctly they are still presented in tabs by "calendar year." This gives the impression the emissions records are just based on a calendar year. However, upon formula review, the rolling totals were based on the latest 12 months and not a calendar 12 months.

Individual HAPs consisted of ethylene glycol and toluene. Ethylene glycol's highest level was 0.09 tpy on a 12 month rolling time period while toluene was 0.01. Limits on individual HAPs are less than 9 tpy. Total VOC emissions highest level was 2.77 tpy while the highest total HAPs emissions were 0.10 tpy. The limit on total HAPs is less than 22.5 tpy. There is not a limit on total VOC from the facility.

The VOC emissions from FGsheetfed (2 Komori sheetfed and one Halm jet press) were less than 2.75 tpy on a 12 month rolling time period. The limit is 16. The limit on VOC content of the fountain

solution is 5% by weight. The records have a separate tab for the fountain solution and all solutions were far less than 5% by weight as applied. There is ductwork over the sheetfed presses to guide heat away from the units and the dryer. A fan is located on the roof. It is solely to keep heat from dissipating into the shop.

FGprinters has had changes as previously mentioned and therefore no VOC emissions.

Lastly, the facility has decided to use rule 287c for the Heidelberg and large format press. The UV coating used in the large format press was 410 liters at its high point. This equates to 108 gallons which is well under the 200 gallons per month. The Heidelberg barely had any usage on any given month.

The facility is deemed to be in compliance.

NAME B. E. [Signature]

DATE 9-22-24

SUPERVISOR W. L. [Signature]