

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

U63230733769822

FACILITY: Michigan Web Press		SRN / ID: U632307337
LOCATION: 10450 Enterprise Drive, Davisburg		DISTRICT: Warren
CITY: Davisburg		COUNTY: OAKLAND
CONTACT:		ACTIVITY DATE: 10/27/2023
STAFF: Adam Bogнар	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: Self Initiated Inspection		
RESOLVED COMPLAINTS:		

On Friday, October 27, 2023, Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division (EGLE-AQD) staff, I, Adam Bogнар, conducted an unannounced inspection of Michigan Web Press located at 10450 Enterprise Drive, Davisburg, MI 48350. The purpose of this inspection was to determine the facility's compliance status with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; and Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division (EGLE-AQD) rules.

I arrived at Michigan Web Press at around 10:30 am. I entered the building through the front door. I met with Cecil Batchelor, Employee. I identified myself and stated the purpose of the inspection. We discussed current operations at this facility and toured the manufacturing area.

Michigan Web Press manufacturers newspapers and magazines for a variety of clients. They operate one cold web press machine. The machine is considered "cold" because there are no curing ovens required. The ink dries predominantly from absorbing into the paper. Cold web presses tend to operate at lower speeds and produce lower volumes of printed material than hot web presses. Cold web presses also tend to produce lower quality images than hot web presses.

The press is fed by large rolls of paper. As the paper unwinds from the roll, it forms a continuous "web" through the press. The web of paper is held taught by a series of rollers that move the paper through the press. Ink is applied using a specialized set of rollers that picks up ink from a reservoir and continuously coats the paper as it rolls through.

There are also several trim machines used to cut and fold newspapers/magazines into their finished form. I don't expect any emissions from these folding/cutting machines.

There are approximately 16 employees operating this plant from 8 am to 5 pm Monday through Friday.

There are four colors of ink used in the web press – Cyan, Magenta, Yellow, and Black. I asked Cecil for the environmental data sheets and monthly usage records for each of these coatings. Cecil provided the environmental datasheets on Monday, October 30, 2023 and the material usage data on Wednesday, November 1, 2023.

There are only two volatile compounds used in all four coating formulations:

- Light Naphthenic Hydrotreated Distillate – CAS number 64742-53-6, Initial Threshold Screening Level (ITSL) = 50 µg/m³
- Hydrotreated Petroleum Middle Distillate – CAS number 64742-46-7, Initial Threshold Screening Level (ITSL) = 50 µg/m³

The total VOC content of these compounds listed in the environmental data sheet is in the table below:

Material	VOC content (%)
Black	4.30
Magenta	5.43
Yellow	7.85
Cyan	7.62

Per my request, Cecil provided me with the purchase orders for all ink used at the facility in the past year. There are four tanks on-site used to receive these materials. New material is ordered once a tank is near empty. Black ink makes up the majority of what is used. The amount of material purchased is summarized in the table below:

Date Ordered	Color	Amount ordered (lbs)
12/6/2022	Black	11,800
7/10/2023	Black	10,760
2/24/2023	Cyan	2,964
2/24/2023	Magenta	2,750
2/24/2023	Yellow	2,900
7/26/2023	Cyan	2,710
7/26/2023	Magenta	2,949
7/26/2023	Yellow	2,902
Total ordered last 12 months		39,735

Cecil stated the company does the same weekly jobs, and that usage is consistent month-to-month. Based on this annual amount purchased, Cecil estimated a monthly usage by dividing the amount purchased by 12. The table below shows the estimated monthly usage and the corresponding estimated monthly VOC emissions:

Color	Amount Purchased past 12 months (lbs)	Estimated monthly usage (lbs)	Estimated monthly VOC emissions (lbs)
Cyan	5674	472.83	36.03

Magenta	5699	474.92	25.79
Yellow	5802	483.50	37.95
Black	22560	1880.00	80.84
Total	39735	3311.25	180.61

I asked Cecil to provide documentation showing that usage is consistent month-to-month. Cecil provided the table below which shows the number of jobs each month, the average amount of pages per job, and the total amount of broadsheet pages produced in that month (Quantity Ordered). One broadsheet page is 22" by 13.5".

Year	Month	Jobs	Ave. Broadsheet Pages/Job	Quantity Ordered
2023	October	208	8.93	1515402
2023	September	183	9.09	1247271
2023	August	195	9.03	1384760
2023	July	174	9.3	1592880
2023	June	180	8.72	1685760
2023	May	201	9.33	1487914
2023	April	188	9.4	1542644
2023	March	207	9.58	1629174
2023	February	178	8.85	1422465
2023	January	173	8.89	1184863
2022	December	177	9.69	1513053
2022	November	209	9.44	2120035

The amount of broadsheet pages shows that usage is relatively consistent month-to-month. The month-to-month variances are not great enough that Rule 290 thresholds would be exceeded in any given month.

Based on this estimated monthly VOC emission rate, this process is exempt from Rule 201 requirements pursuant to Rule 290 (2)(i) since uncontrolled emissions are less than 1000 lbs/month (current estimate is 180.61 lbs/month). I informed Cecil that Michigan Web Coating is required to document and maintain records showing that monthly VOC emissions remain below the Rule 290 threshold of 1000 lbs/month. I also informed Cecil that if material formulations change, it is possible that this exemption will not apply due to the toxic air contaminant requirements of Rule 290. I provided Cecil with a copy of EGLE-AQD's Rule 290.

NSPS QQ

The cold web offset press at this facility is not subject to NSPS QQ - Standards of performance for the Graphic Arts Industry: Publication Rotogravure Printing. The press at this facility is not a "rotogravure printing unit" as defined by NSPS QQ. The ink is applied using offset printing, not rotogravure. Rotogravure lines generally produce higher quality images than offset printing and tend to utilize toluene as a carrier solvent for the ink. Also, in offset printing both sides of the paper

can be coated at the same time - which is the case at this facility. For more information about the differences between cold web offset printing and rotogravure printing, see the link below.

[Checklist of the Difference Between Gravure and Web Offset Printing \(webmartuk.com\)](http://webmartuk.com)

I left the facility at around 11:30 am.

Compliance Determination

Based on my observations during this inspection and record review, Michigan Web Coating is operating 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); and Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division (EGLE -AQD) Administrative Rules.

NAME Adam Bogner

DATE 11/17/2023

SUPERVISOR K. Kelly