

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

N546073482

FACILITY: MICHIGAN PAVING & MATERIALS CO	SRN / ID: N5460
LOCATION: 1600 N ELM ST, JACKSON	DISTRICT: Jackson
CITY: JACKSON	COUNTY: JACKSON
CONTACT: John Peters , Division Manager - HMA Plant	ACTIVITY DATE: 09/11/2024
STAFF: Stephanie Weems	COMPLIANCE STATUS: Compliance
SUBJECT: On-site inspection conducted as required for FY24.	SOURCE CLASS: SM OPT OUT
RESOLVED COMPLAINTS:	

Synthetic Minor / Opt-Out Source. Full Compliance Evaluation (FCE) and Inspection (PCE) of Michigan Paving & Materials Co. (N5460)

Facility Contact

Contact: John Peters – Division Manager

Phone: 517-787-5322

Email: jpeters@mipmc.com

Contact: Sue Hanf – Environmental Engineer

Phone: 734-777-3647

Email: SHanf@mipmc.com

Website: michiganpaving.com

Purpose

On September 11, 2024, I conducted an unannounced inspection of the Michigan Paving & Materials (MPM) facility located in Jackson, Michigan (Jackson County) at 1600 N. Elm St. The purpose of the inspection was to determine the facility's compliance status with applicable federal and state air pollution regulations, particularly Michigan Act 451, Part 55, Air Pollution Control Act and administrative rules, and conditions of Permit to Install (PTI) number 218-94C.

Facility Location

The facility is in Blackman Township. It is surrounded by commercial and residential areas on its western, southern, and eastern property lines, and Interstate 94 on its northern property line. Northeast Elementary School is located approximately 1,500 feet southeast of the facility.

Facility Background

Michigan Paving and Materials, a CRH company, is a commercial paving and asphalt supply company. MPM operates six asphalt plants, and with partner companies Stoneco, The Shelly Company, and Cadillac Asphalt, they operate nine aggregate and materials locations. The MPM operation in Jackson is a hot-mix asphalt (HMA) production facility.

HMA is an engineered product composed of approximately 95% aggregate and about 5% asphalt cement, a petroleum product that acts as the glue to hold the pavement together. MPM's website

indicates that all their asphalt plants are Michigan Department of Transportation (MDOT) certified, and their asphalt products are continuously tested by trained laboratory technicians to ensure that each batch meets or exceeds all specifications.

The current permit, PTI 218-94C was issued June 2, 2022. This permit covers the HMA facility with its conveyors, cold feed aggregate bins, 650 tons per hour counterflow drum dryer and mixer, and fabric filter dust collector, as well as fugitive dust sources like the plant roadways, plant yard, material storage piles and handling operations. The permit also covers six 35,000 gallon liquid asphalt cement storage tanks and heater and eight 300 ton HMA paving material product storage silos.

Regulatory Applicability

The facility is a Synthetic Minor/Opt-Out source for Carbon Monoxide (CO) and for hazardous air pollutants (HAPs) emissions. MPM accepted CO and HAP emission limits in order to remain below major source emission thresholds.

The facility is regulated by PTI 218-94C. They are subject to 40 CFR Part 60 Subpart A – General Provisions of Standards of Performance for New Stationary Sources and 40 CFR Part 60 Subpart I – Standards of Performance for Hot Mix Asphalt Facilities.

Arrival & Facility Contact

No visible emissions or odors were observed upon my approach to the facility I arrived at approximately 9:25 AM proceeded to the facility office to request access for an inspection, provided my identification, and met with John Peters. A pre-inspection conference was held. I informed him of my intent to conduct a facility inspection and to review the various records required by their permit. John extended his full cooperation during the inspection, accompanied me during the full duration of the inspection, and fully addressed my questions and concerns.

Pre-Inspection Meeting

The pre-inspection began with a discussion about the facility's operations. They employ approximately 4 people at the plant and 3-4 people in the lab. They are currently running from around 4:30AM to midnight, but hours of operation are based upon production and the project that they are working on at the time.

We then discussed their permit. I asked whether there had been any recent issues or changes facility wide. John explained that change out of the facility's drum dryer and mixer but stated that no other changes had occurred.

The facility had received a permit modification for the change over from their old dual drum dryer and mixer to their new counterflow drum dryer and mixer.

Onsite Inspection

We began the onsite inspection by walking towards the HMA plant. John explained how the aggregate material is loaded into the plant, and how the conveyors move the aggregate to the drum dryer and mixer. John explained that the new drum and mixer is much more efficient and quieter. John also showed me where the recycled asphalt pavement (RAP) is added into the mix when necessary.

We then walked around and observed the baghouse. It appears to be in good condition.

Next, we observed the tank farm. John confirmed that they do not use Recycled Used Oil (ROU).

We then observed the load out area. There are two loadout bays, controlled by a blue smoke filter system in between. A loadout was occurring while we were in the area, so we stopped to observe. The truck enters the bay and the loadout occurs in three sections. After each section, the truck moves up and stops for the next section to be loaded. During the loadout I did not observe any odors.

Finally, we went up to the control room. We were able to see the loadout control. Each loadout bay has cameras installed to help facilitate the loadout process. We were also able to see the plant operation controls. MPM staff explained how the different batches and processes were controlled

from here. I was able to observe the pressure drop reading on the fabric filter dust collector from here. Everything appeared to be operating correctly.

We then walked by the aggregate piles. No fugitive dusts issues were noted

Post-Inspection Meeting

We proceeded back to a conference room and held a brief post-inspection meeting. I informed John that I did not have any immediate concerns at that time. I explained that I would email my record request to Sue Hanf, and I thanked John for his time and departed the facility at approximately 10:14 AM.

Recordkeeping Request

The following records were requested from MPM through an email (located with this report in facility file) sent to Sue Hanf on September 11th:

RECORD REQUEST

PLEASE SUBMIT THE FOLLOWING RECORDS FOR THE LAST COMPLETE 12 TIME PERIOD UNLESS OTHERWISE NOTED.

SUBMIT TO WEEMSS@MICHIGAN.GOV BY SEPTEMBER 20TH.

EUHMAPLANT

- Records of emissions and operating information kept in accordance with NSPS 40 CFR part 60 Subpart A and I.
- Records of all significant maintenance activities conducted and all significant repairs made to EUHMAPLANT.
- Records for the fabric filter dust collector maintenance consistent with the Preventative Maintenance Program specified in Appendix B.
- The following records for each calendar month that EUHMAPLANT is operated:
 - Identification, type and the amounts (in gallons) of all fuel oils combusted.
 - Sulfur content (percent by weight), specific gravity, flash point, and higher heating value (BTU/lb) of all fuel oils being combusted.
 - Tons of hot mix asphalt containing RAP produced, including the average percent of RAP per ton of hot mix asphalt produced containing RAP.
- The daily records of the following production information for EUHMAPLANT:
 - The virgin aggregate feed rate.
 - The RAP feed rate.
 - The asphalt paving material product temperature.
 - Information sufficient to identify all components of the asphalt paving material mixture.
 - Hours of operation
- Records of the initial mix design and time, taken upon start-up.

- Monthly and 12-month rolling time period emission calculation records of all criteria pollutants and TACs listed in the Emission Limit Table for EUHMAPLANT.
- Records as described in SC VI.3 of all CO emissions and related production data including the dates and times emissions were monitored.
- Records of the average daily, monthly and 12-month rolling time period records of the amount of HMA paving materials produced from EUHMAPLANT.
- Records of the daily pressure drop readings for the fabric filter controlling EUHMAPLANT as required by Appendix B.
- Records of all instances of alarms for the high temperature system for the EUHMAPLANT fabric filter system including the reason the alarm was activated and the actions taken.
- Monthly records of the RAP feed rate, including the average percent of RAP per ton of hot mix asphalt produced containing RAP.

EUYARD

- Records of all activities required by the fugitive dust plan in Appendix A.

FGFACILITY

- The following information for FGFACILITY:
 - Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
 - Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.

Recordkeeping Review

Sue responded to the record request on September 16th. She included an excel workbook with the CO emission monitoring information, maintenance log, emissions calculations, and all daily and monthly recordkeeping information. She also included a copy of their fugitive emissions calculations, and a picture of the facility's mix change print outs.

After reviewing the records and emission calculations, it appears that MPM is adhering to all recordkeeping requirements and emission limits. As of August 2024, the facility has reported 524,320 tons of HMA produced per 12-month rolling time period. This is well below the 895,000 tons that is allowed by the permit. Additionally, records show that the facility is not producing more than 650 tons of HMA paving material per hour or more than 50% RAP material used, keeping with the requirements of the permit.

Compliance Summary

Based upon the visual observations and the review of the records, MPM appears to be in compliance with the requirements of their permit.

At this time, PTI 218-94A can be voided as the dual drum dryer and mixer have been dismantled and removed from service and the counterflow drum dryer and mixer are installed and operating.

NAME Steph Weems

DATE 9/30/2024

SUPERVISOR [Signature]