

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

N546049900

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: 08/23/2019
STAFF: Stephanie Weems	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection.		
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

Contact : Jeff Reed - Division Manager
Phone: 616-828-5227
Email: jreed@mipmc.com

Website: michiganpaving.com

Purpose

On August 23, 2019, I conducted an announced, scheduled inspection of the Michigan Paving & Materials (MPM) facility located in Jackson, Michigan (Jackson County) at 1600 N. Elm St. An unannounced inspection was attempted on August 14th, but I was informed by the receptionist upon my arrival that all facility personnel who would be able to accompany me were out at an event or sick. 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 218-94A.

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. (Image 1) 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 218-94A was issued May 9, 2007. This permit covers the HMA facility with its conveyors, dual drum dryer and mixer, and fabric filter dust collector, as well as the fugitive dust sources, liquid asphalt cement storage tanks, and HMA storage silos.

Emission Unit / Flexible Group Details

Emission Unit ID	Emission Unit Description	Stack Identification
EUHMAPLANT	Hot mix asphalt (HMA) facility including: Aggregate conveyors 650 tons per hour dual drum dryer and mixer Fabric filter dust collector	SVHMAPLANT
EUYARD	Fugitive dust sources including: Plant roadways Plant yard Material storage piles Material handling operations (excluding cold feed aggregate bins)	Fugitive Dust
EUACTANKS	Liquid asphalt cement storage tanks	N/A
EUSILOS	Hot Mix Asphalt (HMA) paving material product storage silo	N/A
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.		

FLEXIBLE GROUP SUMMARY TABLE

Flexible Group	Emission Units Included in Flexible Group	Stack Identification
FGFACILITY	All process equipment at the stationary source including equipment covered by other permits, grand-fathered equipment and exempt equipment.	N/A

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 218-94A. 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.

The facility reports its emissions to Michigan Air Emissions Reporting System (MAERS).

Arrival & Facility Contact

No visible emissions or odors were observed upon my approach to the facility I arrived at approximately 8:56 AM proceeded to the facility office to request access for an inspection, provided my identification, and met with Jeff Reed and John Peters, both HMA Division Managers. A pre-inspection conference was held with John and Jeff, during which a copy of the facility's PTI and a copy of the last inspection report were provided. I informed them of my intent to conduct a facility inspection and to review the various records required by their permit. They both extended their 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 35 people. They typically run two shifts, day and night. Typical hours of operation are from 5 AM to 7 PM, but based upon demand and different circumstances, there are times when they run outside of these hours, sometimes all night.

We then discussed their permit. I asked whether ADC experienced any recent issues or changes facility wide. John said that, other than the new tanks that were put in to replace old tanks, nothing else had changed. John was able to confirm that the new tanks had the vapor condensation and recovery system on them.

Onsite Inspection

We began the onsite inspection by walking by the aggregate piles. No fugitive dusts issues were noted. I did notices that, as in accordance with their Fugitive Dust Plan, all of the roadways where the HMA haul vehicles travel are paved with HMA.

Next, we walked towards the HMA plant. We were then joined by Sue Hanf, Environmental Engineer. John explained how the aggregate material is loaded into the plant, and how the conveyors move the aggregate to the drum dryer. From there the aggregate is moved to a smaller drum and mixed with the liquid asphalt. John also showed me where the recycled asphalt pavement (RAP) is added into the mix when necessary. John explained that, at the time of installation of this plant, the dual drum dryer they have was the best technology for controlling odors and emissions. He explained that the facility is looking into changing to a counterflow drum around 2021, but he's not quite sure if it will happen.

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

Next, we observed the tank farm (Image 2), and John explained the changes that were made here in December 2018/early 2019. I explained that Sue had sent AQD a letter regarding the change in tanks. The specifics of the new tanks are located in the letter in the facility file. Sue and John explained that they still have a tank designated for recycled used oil (RUO), but they haven't used RUO in about 12 years because it is not cost effective for them.

We then observed the load out area. There are two loadout bays, controlled by a blue smoke filter system in between. (Image 3) 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. The reading was 6.13 inches, well within the range of 2-10 inches.

Post-Inspection Meeting

We proceeded back to a conference room and held a brief post-inspection meeting. I informed Jeff and John that I did not have any immediate concerns at that time. Throughout the entire inspection, John, Jeff, Sue and the staff of MPM extended their full cooperation. I thanked them for their time and departed the facility at approximately 10:03 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 August 15th:

ALL RECORDS ARE REQUESTED FROM JULY 2018 TO PRESENT UNLESS OTHERWISE NOTED

EUHMAPLANT

1. Records of CO emission monitoring from EUHMAPLANT (SC 1.26)
2. Records kept on file of emissions and operating information to comply with 40 CFR Subparts A and I for EUHMAPLANT (SC 1.21).
3. Log of all significant maintenance activities conducted, and all significant repairs made to EUHMAPLANT (SC 1.22).
4. Monthly records of identification, type, and the amounts (in gallons) of all fuel oils combusted (SC 1.23a)
5. Monthly records of sulfur content (percent by weight), specific gravity, flash point, and higher heating value (Btu/lb) of all fuel oils being combusted (SC 1.23b)

6. Monthly records of tons of hot mix asphalt containing RAP produced, including the average percent of RAP per ton of hot mix asphalt produced containing RAP (SC 1.23c)
7. Intermittent daily records of the following production information for EUHMAPLANT **for 2019 season** as stated in SC 1.24:
 - a. The virgin aggregate feed rate
 - b. The RAP feed rate
 - c. The asphalt paving material product temperature
 - d. Information sufficient to identify all components of the asphalt paving material mixture
8. Monthly and 12-month rolling emission calculation records of all criteria pollutants and HAPs listed in the emission limit table for EUHMAPLANT (SC 1.25).
9. Average daily, monthly, and 12-month rolling time period records of the amount of HMA paving materials produced from EUHMAPLANT (SC 1.27).
10. Recordkeeping documents for the pressure drop across the fabric filter dust collector **for 2019 season** (Appendix B Condition 1.b)
11. All fabric filter dust collector inspection records as outlined in Appendix B Condition 8.

EUYARD

1. Calculations of the annual fugitive dust emissions of particulate matter (SC 2.2)

FGFACILITY

1. 12-month rolling HAPs emission calculations (SC 5.2)
2. Dust control activity records **for 2019 season** (Appendix A Condition 5)

Recordkeeping Review

Sue responded to the record request on August 20th. 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 two of the facility's mix change print outs. These mix change print outs provide the records required in special condition 1.24 for EUHMAPLANT. Sue indicated that, due to the large volume of these records, more can be reviewed during the inspection.

After reviewing the records and emission calculations, it appears that MPM is adhering to all recordkeeping requirements and emission limits. As of July 2019, the facility has reported 359,919 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, 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.



Image 1(1) : Aerial view

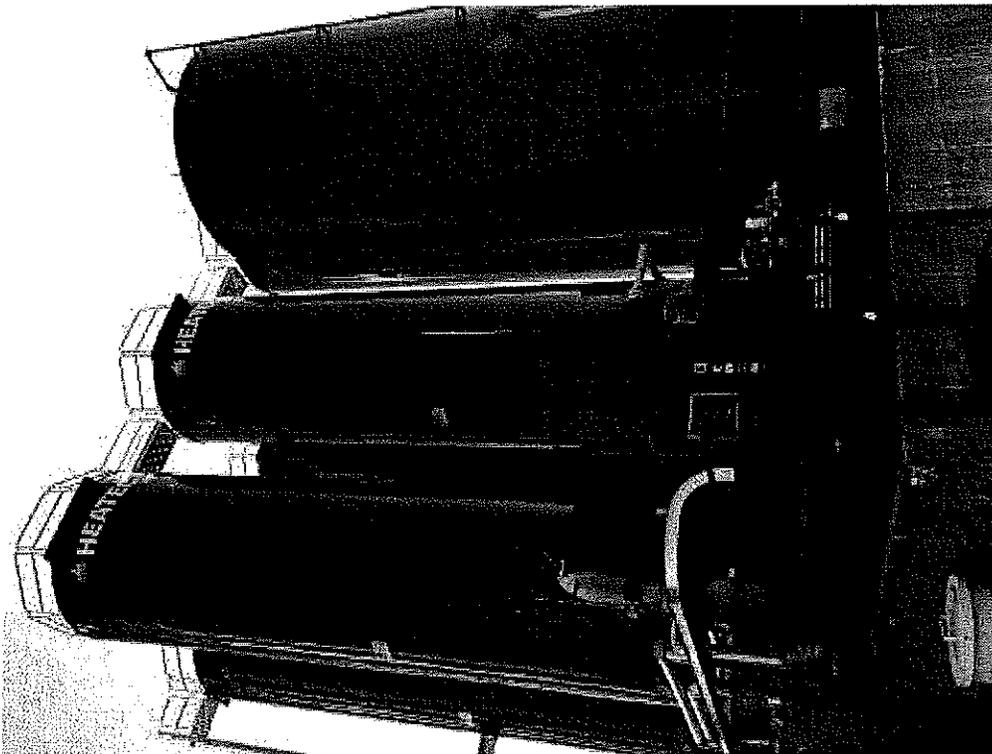


Image 2(2) : Tank farm

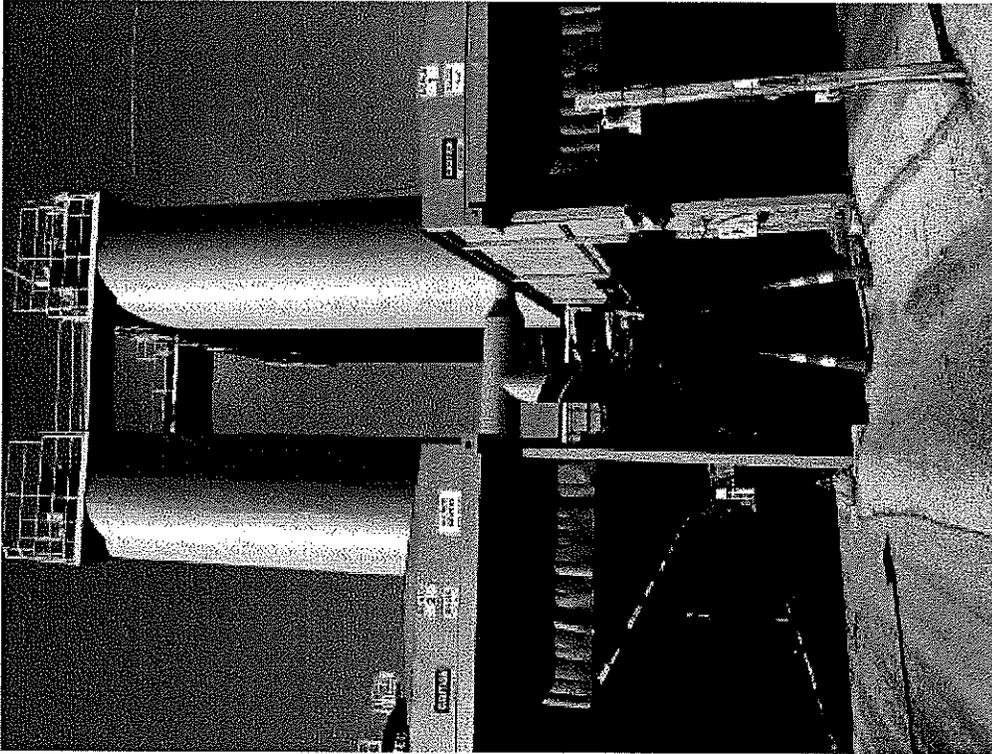


Image 3(3) : Loadout area with emission control.

NAME Steph Weiss

DATE 8.23.19 SUPERVISOR su