

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

N075859503

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| FACILITY: MICHIGAN PAVING & MATERIALS CO. | | SRN / ID: N0758 |
| LOCATION: 1100 MARKET SW, GRAND RAPIDS | | DISTRICT: Grand Rapids |
| CITY: GRAND RAPIDS | | COUNTY: KENT |
| CONTACT: Jake Dietz , Plant Operator | | ACTIVITY DATE: 08/05/2021 |
| STAFF: Michael Cox | COMPLIANCE STATUS: Compliance | SOURCE CLASS: SM OPT OUT |
| SUBJECT: Scheduled Unannounced Inspection | | |
| RESOLVED COMPLAINTS: | | |

On Thursday August 5, 2021, AQD Staff Michael Cox (MTC) arrived at Michigan Paving and Material located at 1100 Market Avenue, Grand Rapids, Michigan to conduct an unannounced, scheduled inspection and met with Jake Dietz, Plant Operator. In the facility's control room we commenced discussions on plant operations and recordkeeping which Mr. Dietz was very familiar with and had everything up-to-date and immediately available.

FACILITY DESCRIPTION:

Michigan Paving & Materials Co. is a hot mix asphalt (HMA) facility that is permitted pursuant to Opt-out Permit to Install No. 66-84F, which also covers the aggregate conveyors, a maximum rated 650 ton per hour counter-flow HMA drum dryer/mixer with fabric filter dust collector for control of particulate matter. This permit also contains conditions for the yard, the liquid asphalt cement storage tanks and the HMA storage silos. The permit contains synthetic minor limits for Hazardous Air Pollutants (HAPs). This HMA plant is also subject to New Source Performance Standard 40 CFR Part 60 Subparts A and I. The most recent stack test was conducted on May 25th and May 26th 2021 to verify particulate matter (PM) emissions. The results of the stack test indicated that the facility is meeting the PM requirements of Opt-Out Permit to Install No. 66-84F.

COMPLIANCE EVALUATION:**EUHMAPLANT****Emission Limits:**

The emission limits in the permit have various methods of compliance, including stack testing, monitoring through a hand held CO monitoring device and recordkeeping. The PM stack testing has been completed and demonstrated compliance. The CO stack testing has been conducted, and the hand held monitoring is being done in accordance to the permit requirements. Annual CO, and NO_x emission limits are addressed in FGFACILITY below. Records of SO₂ emissions were requested and provided for the time period of January 2019 through August 5, 2021. The highest monthly SO₂ emission occurred during the month of August 2019 when 0.1535 ton of SO₂ was emitted. The highest 12-consecutive month SO₂ emission occurred during the 12-month periods ending in November 2019, December 2019, January 2020, February 2020, and March 2020 when 0.757 ton of SO₂ was emitted. Additional pollutant recordkeeping is being maintained in an acceptable format, which includes data on daily emissions for each pollutant. The permit indicates that the emission limits are based on 895,000 tons HMA paving material production. This plant currently operates at less than half that production limit.

Material Limits:

The material usage limits apply to burning any fuel that has a sulfur content of less than 0.6% by weight, and limits for metals in recycled used oil. No liquid fuel is used at the facility at this time. Fuel logs were requested and provided for the time period of January 2019 through August 5, 2021 for review. From the records reviewed natural gas is the only fuel being utilized by the facility. Additionally, the HMA plant is limited to a maximum 50% RAP material on a monthly average and a production limit of 650 tons per hour of HMA and 895,000 tons of HMA per a 12-consecutive month rolling time period. Production logs were requested and provided for the time period of January 2019 through August 5, 2021. The maximum RAP used at this plant was 40% which occurred on April 22,

2021. The highest hourly production rate of HMA occurred on August 7, 2019, when 413.69 tons per hour of HMA was produced. The highest 12-consecutive month rolling HMA produced was noted to be 445,520 tons which occurred during the 12-month period ending in January 2020.

Process/Operational Limits:

The process operational limits include specific plans as detailed in Appendix A, B and C. These cover fugitive dust, preventative maintenance of equipment and a compliance monitoring plan for recycled used oil. The range for the fabric filter pressure drop is listed under Special Condition IV. 1 as being between 2 and 10" H₂O. The pressure drop at the time of the inspection was noted to be 3.0" H₂O and Mr. Dietz indicated the typical range based on the production rate is 3.5-4.5" H₂O. No visible emissions were noted from the baghouses. Maintenance logs for the time period of January 2019 through August 5, 2021 were requested and provided. No issues were noted during the review.

Testing:

The testing requirements included complete stack sampling and odor threshold analysis that was completed June of 2008 and indicated compliance. Stack testing was also conducted on May 25th and 26th of 2021 for particulates, which also indicated compliance.

Monitoring:

The monitoring requirements are being conducted and recorded in a satisfactory manner. The feed rates are monitored and recorded by the systems control programs in the operator tower, which was upgraded in 2018. Mr. Dietz had all information available to view. The permit requires CO monitoring at the start-up of the season and every 500 hours of operation. Mr. Dietz indicated that while they don't operate 500 hours in a month, it is monitored every month to ensure compliance. The CO readings must be below 500 ppm, and since the 2016 burner replacement, the readings are at 20 ppm. At the time of the inspection, the drum mix and drum exhaust temperatures were being monitored and were 330°F and 315°F respectively.

Recordkeeping/Reporting/Notification:

All required recordkeeping is being maintained, and Sue Hanf, Environmental Engineer with Michigan Paving provided MTC with access to the spread sheets to evaluate for accuracy. All records were requested and provided by Ms. Hanf for the time period of January 2019 through August 5, 2021. No issues were noted during the review.

EUYARD

The facility maintains a program for fugitive emissions control, and the documentation is included on the Daily Production Log provided by the facility for the time period of January 2019 through August 5, 2021. MTC observed trucks entering and exiting the facility. The trucks were noted to be using roll-tops to contain fugitive emissions coming from the bed of the truck. Mr. Dietz also stated that about once a month the facility uses a brine to curtail fugitive emissions, since the brine typically lasts longer than water. No excessive fugitive emissions were observed during the inspection.

EUACTANKS

No visible emissions were observed from the liquid storage tanks. The facility is operating the tanks as required under Opt-Out Permit to Install No 66-84F.

EUSILOS

No visible emissions were observed from the silos. The facility is operating the silos with an emission capture system at the top of the silos and a load-out control at the bottom of the silos as required under Opt-Out Permit to Install No 66-84F. During the site visit, multiple trucks were observed receiving HMA from the silos. Load-out is controlled by the operator. Once the trucks were full it was noticed that the load-out system closes off the silo to prevent over filling of HMA. Maintenance records were requested and provided for the time period of January 2019 through August 5, 2021. No issues were noted.

FGFACILITY

The emission limit for each individual HAP is less than 9.0 tons per 12-consecutive month rolling time period, and aggregate HAPs are limited to less than 22.5 tons per 12-consecutive month rolling time period. Records of HAP emissions were requested and provided for the time period of January 2019 through August 5, 2021. The highest individual HAP emission occurred during the 12-consecutive month time periods ending in November 2019, December 2019, January 2020, February 2020, and March 2020 when 0.691 ton of formaldehyde was emitted. The highest aggregate HAP emission occurred during the 12-consecutive month time periods ending in November 2019, December 2019, January 2020, February 2020, and March 2020 when 0.945 ton of aggregate HAPs were emitted. The facility is also required to keep monthly and 12-consecutive month NO_x emissions. Records of NO_x emissions were requested and provided for the time period of January 2019 through August 5, 2021. The highest monthly NO_x emission occurred during the month of August 2019 when 1.175 tons of NO_x was emitted. The highest 12-consecutive month NO_x emission occurred during the 12-month periods ending in November 2019, December 2019, January 2020, February 2020, and March 2020 when 5.79 tons of NO_x was emitted.

Notation:

Compliance activities appear to be in place for each of the Appendices A, B C, and D. Records to support compliance with Appendices A, B, C, and D were provided for review for the time period of January 2019 through August 5, 2021. No issues were noted.

EVALUATION SUMMARY

Michigan Paving and Materials- Grand Rapids appeared to be in compliance with PTI No. 66-84F and applicable air quality regulations as a result of this inspection.

NAME Michael T. CoxDATE 8/25/2021SUPERVISOR HH