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

N057969160

FACILITY: KLETT CONSTRUCTION DIVISION		**SRN / ID:** N0579
LOCATION: MICHIGAN PAVING & MATERIALS CO, PAW PAW		**DISTRICT:** Kalamazoo
CITY: PAW PAW		**COUNTY:** VAN BUREN
CONTACT: Jeff Reed , HMA Pland Manager		**ACTIVITY DATE:** 08/16/2023
STAFF: Rachel Benaway	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: On-site inspection to verify compliance with PTI #269-98D and all state and federal air use regulations.		
RESOLVED COMPLAINTS:		

AQD staff (Rachel Benaway and Jared Edgerton) completed an unannounced air quality inspection of Michigan Paving & Materials Co. (MPMC) (N0579), a hot mix asphalt (HMA) plant located in Paw Paw, MI, on 8/16/2023. The purpose of this inspection was to verify MPMC is in compliance with their Permit to Install (PTI) #263-98D and all state and federal air use regulations. MPMC is considered a synthetic minor source of emissions for hazardous air pollutants (HAPs) and a minor source of nitrogen oxides (NOx), sulfur oxides (SOx), carbon monoxide (CO), lead (Pb), and particulate matter (PM) emissions. The facility is subject to New Source Performance Standard (NSPS) 40 CFR 60 Subpart I for Hot Mix Asphalt Facilities. The last inspection was completed at the facility on 6/82018. Jeff Reed is the Plant Manager. Sue Hanf, Environmental Engineer, is responsible for submitting requested records. Adam Davison, facility operator, was present for the on-site inspection. Personal protection equipment includes a hard hat, safety glasses, and safety shoes.

The facility operates 1 shift per day, depending on weather and demand, from April or May to November and employs approximately 3 people at the site. No new equipment has been installed and no current equipment has been relocated or modified in the past two years.

Equipment at Facility
EUHMA: HMA facility: aggregate conveyors, drum mixer, baghouse fabric filter dust collector
EUYARD: Fugitive dust sources: roadways, yard, storage piles, material bins
EUACTANKS: Liquid asphalt cement storage tanks
EUSILOS: HMA paving material product storage silo

Aggregate material is stored in bins and then conveyed to the main drum where they are heated. The heated material is sent to the mixing drums and then conveyed into one of the four silos where it is stored until a truck comes for a delivery. The recipe for the day is programmed into the computer and executed. Belt scales are used to monitor the virgin and recycled asphalt product (RAP) feed rate continuously.

On site, there are 2 RAP feeders, 10 cold or virgin feeders, 4 asphalt cement (AC) tanks, a baghouse, and 4 silos. The facility uses 3 different types or RAP (coarse, fine, and crushed). About 90% of the RAP used is crushed. The facility either outsources crushing operations to Thompson Recycling or it is done by their sister company Stoneco, located nearby.

The following is a summary of information obtained from the on-site inspection and the submittal of requested records. Where applicable, compliance determinations are indicated for each special condition established in the PTI, organized by emission unit or flexible group.

EUHMA

This portion of the HMA facility includes the aggregate conveyors, dual drum mixer system, and a baghouse fabric filter dust collector for particulate matter pollution control.

The baghouse inlet was at 228 degrees (F) and the outlet was at 207 degrees (F).

Emission Limits:

SC	Pollutant	Limit	Time Period	COMPLIANT?
1.1a	CO	0.201 lb/ton of HMA material produced	1 hour	*
1.1d	CO	89.5 tpy	12-MRT	Yes
1.1e	SO2	0.19 lb/ton of HMA material produced	1 hour	*
1.1f	SO2	85 tpy	12-MRT	Yes
1.1g	NOx	0.12 lb/ton of HMA material produced	1 hour	*
1.1h	NOx	53.4 tpy	12-MRT	Yes

*No emissions testing has been requested to verify compliance with these limits.

Comment: Emissions calculations were submitted demonstrating compliance with the 12-month rolling totals in SC 1.1d, 1.1f, and 1.1h.

SC	Condition	COMPLIANT?
1.2	Shall not burn in EUHMA any hazardous waste, blended fuel oil, or specification recycled used oil (RUO) containing any contaminant that exceeds the following concentrations or for which the flash point, ash content, or acidity vary from standard specified in following table: Contaminant Limit Units Contaminant Limit Units Arsenic 5.0 ppmw Total Halogens 1000.0 ppmw Cadmium 2.0 ppmw Min Flash Point 100.0 °F Chromium 10.0 ppmw Max Ash Content 1.0 Weight % Lead 100.0 ppmw Acidity Minimum pH = 4 PCBs 1.0 ppmw Maximum pH = 10 Sulfur 1.0 Weight % **Comment: The facility reports that no RUO is being used at this time.**	Yes
1.3	Shall not use any asbestos tailings or asbestos containing waste materials in EUHMA	Yes
1.4	Shall limit asphalt mixture process in EUHMA to a maximum of 50% RAP materials based on a monthly average. **Comment: Since January 2022, the highest average RAP content of the asphalt mixture was 27% in August of 2023.**	Yes
1.5	Shall not process more than 890,000 tons of HMA paving materials in EUHMA per 12-month rolling time period. **Comment: Since January 2022, the highest 12-month rolling time period amount of HMA produced was 181,583 in August of 2022.**	Yes
1.6	Shall not process more than 600 tons of HMA paving materials in EUHMA per hour based on a daily average, determined by dividing daily HMA production by daily operating hours.	Yes

	Comment: The highest hourly production rate within the past year occurred on 5/23/23 at 370 lb/hr.	
1.7	Shall not operate EUHMA unless Compliance Monitoring Plan for RUO (Appendix C) is implemented and maintained. **Comment: The facility reports that no RUO is being used at this time.**	**NA**
1.8	Shall not operate EUHMA unless program for fugitive emission control of EUYARD (Appendix A) is implemented and maintained. **Comment: The facility submitted daily records indicating dust control application times, reasons, and type, for the roadways, bins, and belts.**	**Yes**
1.9	Shall maintain efficiency of EUHMA drum mix burners by fine tuning to control CO emissions	**Yes**
1.10	Shall not operate EUHMA unless plan for minimizing emissions during startup, shutdown, and malfunctions is submitted	**Yes**
1.11	Shall not operate EUHMA unless fabric filter dust collector is installed, maintained, and operated in satisfactory manner: requires pressure drop range between 2 and 8 inches of water column. **Comment: Daily pressure drop readings were submitted demonstrating compliance with the range listed.**	**Yes**

Monitoring/Recordkeeping:

SC	Condition	COMPLIANT?
1.13	Monitor virgin aggregate feed rate and RAP feed rate on a continuous basis	**Yes**
1.14	Use handheld CO monitor for CO emissions and production data associated with time the emissions data were collected. One data sheet will be recorded for each: a) Upon startup of each paving season b) Upon a malfunction c) After every 500 hours of operation A data set consists of at least 8 separate CO readings taken over 30 minutes or longer. **Comment: Monitoring data sheet was submitted demonstrating compliance with the testing parameters listed in this condition. No readings above action level were reported.**	**Yes**
1.16	Install, calibrate, maintain, and operate device to monitor, by observation, pressure drop across dust collector once per day. Device shall be certified by manufacturer to be accurate within 2 in water gauge pressure and must be calibrated on an annual basis	**Yes**
1.17	Monitor fuel usage rate on daily basis in gallons per day **Comment: The facility is monitoring fuel usage on a daily basis.**	**Yes**
1.20	Maintain a log of significant maintenance (Appendix B) **Comment: A maintenance log was submitted for the baghouse indicating blacklight, ductwork, and blow pipe inspections. The facility is tracking the # of bags replaced and when.**	**Yes**
1.21	Keep records for each calendar day EUHMA is operated: a) Identification, type, and amounts (gallons) of all fuel oils combusted	**Yes**

	b) Sulfur content (% by wt), specific gravity, flash point, and higher heating value (Btu/lb) of all fuel oils being combusted	Yes
	c) Tons of hot mix asphalt containing RAP produced, including average percent of RAP per ton of hot mix asphalt produced containing RAP	Yes
1.22	Keep records: a) Virgin aggregate feed rate (continuous) b) The RAP feed rate (continuous) c) Asphalt paving material product temperature (intermittent) d) Identify all components of asphalt paving material mixture (continuous) Record initial mix design and time upon startup and record each time and mix when new design is activated. Keep records on file until end of paving season	 Yes Yes Yes Yes Yes
1.23	Monthly and 12-MRT period emissions calculation records of all criteria pollutants and HAPs in emission table. Use emission factor if stack test is not available.	Yes
1.24	Dates and times CO was monitored for SC 1.14. Use data to calculate lb CO emitted per ton of HMA material produced. **Comment: Monitoring data sheet was submitted demonstrating compliance with the testing parameters listed in this condition. No readings above action level were reported.**	Yes
1.25	Hourly, Monthly, and 12-MRT records of amount of HMA material produced for last 5 years.	Yes

The facility appears to be in compliance with all PTI conditions and requirements and all state and federal air use regulations at this time.

NAME Rachel Stanaway DATE 9/26/23 SUPERVISOR