

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Records Review (In office)

A253454040

FACILITY: Michigan Paving and Materials- Woodland		SRN / ID: A2534
LOCATION: 3566 Millcreek Ave., COMSTOCK PARK		DISTRICT: Grand Rapids
CITY: COMSTOCK PARK		COUNTY: KENT
CONTACT: Sue Hanf, Environmental Engineer		ACTIVITY DATE: 06/02/2020
STAFF: Adam Shaffer	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Partial Compliance Evaluation - 2019 Paving Season Records Review		
RESOLVED COMPLAINTS:		

A partial compliance evaluation (PCE) was completed by Air Quality Division (AQD) staff Adam Shaffer (AS) for Michigan Paving and Materials – Woodland Facility (MP) by requesting applicable records on June 2, 2020 to verify compliance with Permit to Install (PTI) No. 990-90B. A site inspection to verify onsite compliance and any additional records will be completed at a later date.

Facility Description

MP is an asphalt production facility located in Comstock Park, MI. MP is an opt out source for hazardous air pollutants (HAPs) and is in operation under PTI No. 990-90B.

Records Compliance Evaluation

A request was sent to Ms. Sue Hanf, Environmental Engineer, of MP on June 2, 2020, for records required by PTI No. 990-90B specifically for the 2019 paving season. Requested records were later provided on June 3, 2020.

EUHMAPLANT

This emission unit is for the hot mix asphalt (HMA) facility including: aggregate conveyors, 650 tons per hour parallel flow drum dryer / mixer and fabric filter dust collector.

Natural gas was the only fuel that was burned during the 2019 paving season by MP. No hazardous waste, blended fuel oil, recycled used oil or asbestos / waste materials containing asbestos were used during the 2019 paving season.

A list of all significant maintenance activities that were completed for the 2019 paving season was provided. Additionally, a daily list of items to be inspected and examples of plant repairs was provided. Based on the records provided, MP appears to be keeping track of all major maintenance activities completed for EUHMAPLANT.

Daily records were requested for various items per PTI No. 990-90B. Based on the records reviewed, MP is keeping track of daily records of hot mix asphalt containing RAP produced and average percentages of RAP per ton of hot mix asphalt produced. Additionally, MP appears to be keeping track of daily records of virgin aggregate feed rates, RAP feed rates, and asphalt paving material product temperatures. MP has a monthly average limit of 50% of RAP material used during process operations. The highest monthly average percentage of RAP used for the 2019 paving season was 32.49% which is within the permitted limit.

Per Special Condition (SC) 1.25, MP shall keep track of monthly and 12-month rolling time periods of all criteria pollutants and toxic air contaminants (TACs) listed in the Emission Limit Table for EUHMAPLANT. Records were requested and reviewed back through the 2019 paving season. Compliance with the majority of emission limits that are listed in this emission

limit table are determined through testing, with MP demonstrating compliance during the most recent testing in 2008. The remaining pollutants listed in the Emission Limit Table are identified and discussed further below.

Pollutant	Limit	Time Period	Natural Gas AP-42 Emission Factors
CO	0.201 lb per ton	1 hour	0.13 lb per ton
SO ₂	0.14 lb per ton	1 hour	0.0034 lb per ton
NO _x	0.12 lb per ton	1 hour	0.026 lb per ton

MP uses natural gas AP-42 emission factors to demonstrate compliance with hourly CO, SO₂, and NO_x emission limits listed above. CO is subject to a 78.75 tpy emission limit per a 12-month rolling time period. Records reviewed for 2019 show the highest 12-month rolling time period for CO emissions to be 27 tpy for October 2019, which is within the permitted limit. Based on the records reviewed, MP appears to be keeping track of monthly / 12-month rolling time periods of criteria pollutants and TACs emitted for EUHMAPLANT.

Per SC 1.26 MP shall keep daily emission records of hydrogen chloride and SO₂. Additionally, control efficiencies described in SC 1.26 may be used when calculating emissions depending on if RAP is used during asphalt production or if its virgin aggregate. Upon further review of PTI No. 990-90B during the permitting process, this condition would appear to be based on the company's use of recycled used oil (RUO) at the time. MP did not use RUO during the 2019 paving season but instead uses natural gas. The AP-42 emission factors were used to calculate daily pounds of SO₂ emissions. There appears to be no hydrogen chloride emissions when using natural gas. After further review this appears to be acceptable and MP appears to be keeping track of daily hydrogen chloride and SO₂ emissions.

Per SC 1.27, MP shall keep records of all CO emissions and related production data including dates and times emissions were monitored which is then used to calculate pounds of CO emitted per ton of HMA paving materials produced. Dates and times of each event that CO emissions were monitored was requested for the 2019 paving season. Three CO monitoring events initially appeared to be completed for 2019 with a startup check done on April 22, 2019. A second CO monitoring event was completed shortly after and appeared to be due to higher moistures during operations. A third CO monitoring event for the 500-hour check was done in the middle of July 2019. Based on the records, it appeared MP worked an additional 700 hours following the last CO monitoring event in July, and this was brought to the attention of MP staff. It was later determined that an additional CO monitoring event had been completed on September 17, 2020. After further review, MP appeared to have adequately completed CO monitoring events for the 2019 paving season.

Per SC 1.28, MP shall keep track of daily monthly and 12-month rolling time periods of total HMA paving materials produced. Records were provided for the 2019 paving season. The highest daily amount of HMA paving materials produced for the 2019 paving season was 422.36 tons / hour over a daily average on June 25, 2019, which is within the material usage limit identified in SC 1.7 of 650 tons / hour over a daily average. The highest monthly production amount was 78,956 tons of HMA paving materials in September 2019. The highest

12-month rolling total of HMA paving materials produced was 414,918 tons of paving material per October 2019. This is within the material usage limit identified in SC 1.6 of 750,000 tons of material per a 12-month rolling time period. After further review, it appears that MP is keeping adequate track of daily, monthly and 12-month rolling time periods of HMA paving materials being produced.

FGFACILITY

This flexible group is for all process equipment at the stationary source including equipment covered by other permits, grand-fathered equipment and exempt equipment.

MP is subject to individual / aggregate HAP emission limits of 8.9 tpy and 22.4 tpy respectively per a 12-month rolling time period. Individual and aggregate HAP emission records were requested and reviewed for the 2019 paving season. The highest 12-month rolling time period of aggregate HAPs emitted was 0.88 tpy as of October 2019. This is well within the permitted limit for both individual and aggregate HAPs. The most emitted HAP for 2019 appears to be formaldehyde. MP appears to be keeping track of individual / aggregate HAP emission records.

Appendix B – Preventative Maintenance Program For the Fabric Filter Dust Collector

Per Appendix B of PTI No. 990-90B, MP shall keep daily records of the pressure drop across the fabric filter dust collector. Records were requested and reviewed for the 2019 paving season. Upon review, the pressure drop daily records for the 2019 paving season show a range of 2.4 – 5.0 inch of water column. Normal operational range for the pressure drop is 2 – 6 inch of water column. MP appears to be keeping track of daily pressure drop records and the records appear to indicate satisfactory operation.

An initial black light test was completed at 5am on April 19, 2019 with eight bags being replaced. A second black light test was completed on April 23, 2019 with two additional bags being replaced. After further review, this appears to be acceptable.

Maintenance records were requested and reviewed for the 2019 paving season. After further review, the records provided appear to be acceptable. MP staff stated there were no visible emissions observed during the 2019 paving season and daily stack observation records were provided.

Conclusion

Based on a review of the records provided for the 2019 paving season associated with PTI No. 990-90B, MP appears to be in compliance with the permitted limits and recordkeeping requirements. As stated previously, a follow up site inspection will be conducted to later verify the facility's compliance status and review additional records.

NAME Adam J. Griffin

DATE 7-20-20

SUPERVISOR [Signature]