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

N262654534

FACILITY: ACE ASPHALT & PAVING CO INC PLANT 4		SRN / ID: N2626
LOCATION: 1750 RANGE RD, PORT HURON		DISTRICT: Southeast Michigan
CITY: PORT HURON		COUNTY: SAINT CLAIR
CONTACT: Alicia Ramsdell , Environmental Engineer		ACTIVITY DATE: 07/23/2020
STAFF: Shamim Ahammod	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Conducted a scheduled inspection to determine the company's compliance with the requirements of PTI No. 153-86F.		
RESOLVED COMPLAINTS:		

On July 23, 2020, Michigan Department of Environment, Great Lakes and Energy-Air Quality Division (EGLE-AQD) staff, I (Shamim Ahammod) conducted a scheduled initiated inspection of Ace Asphalt & Paving Co, Inc. Plant 4 (N2626) located at 1750 range Road, Port Huron, Michigan. The purpose of the inspection was to determine the company's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and the conditions of Permit to Install (PTI) No. 153-86F.

Inspection Arrangement

Due to the COVID-19 pandemic, I prearranged this announced inspection on July 23, 2020. I also requested the record-keeping information before the inspection day to reduce the inspection time. Ms. Alicia Ramsdell, Environmental Engineer sent me the requested information via email.

INSPECTION

On July 23, 2020, at 10:30 AM, I arrived at the facility and inspected the surroundings. Later, I called Ms. Ramsdell and asked if someone from the plant could meet with me. In the plant, I greeted Aaron McClelland, Maintenance personnel. I introduced myself to Mr. McClelland, showed him my credentials, provided him my business card and stated the purpose of the visit. At the time of inspection, the facility was operating. I observed steam were coming out from the exhaust stack of the facility. I observed the fabric filter dust collector, paving material product storage silos and liquid asphalt cement tanks.

SOURCE DESCRIPTION:

This facility manufactures asphalt materials and provides complete asphalt paving operations. There are a 500 tons per hour counterflow drum mixer, aggregate conveyors and fabric filter dust collector in the facility. The basic manufacturing process of hot mix asphalt consists of removing the moisture from the aggregates, heating the aggregates and coating the aggregates with hot asphalt cement. There are four hot mix asphalt (HMA) storage silos with a capacity of 300 tons each.

EU-001

Hot mix asphalt (HMA) facility including: Aggregate conveyors, 500 tons per hour counterflow drum mixer with a fabric filter dust collector rated at 78,000 acfm.

Emission Limits

Per SC 1.1c and (SC 1.23, 1.26 and 1.28), the permittee provided SO₂ emission record for last 12 month beginning from June 2019 to May 2020. The 12 months total SO₂ emission was 29.3 tons that was below the 12-month limit of 78.9 tons.

Per SC 1.1f, SC 1.26 and SC 1.28, the permittee provided CO emissions record for last 12 month beginning from June 2019 to May 2020. The 12 months total CO emission was 22.4 tons that was below the 12-month limit of 60.3 tons.

Material Usage limits

Per SC 1.2, the permittee only burns natural gas according to Ms. Ramsdell. Per SC 1.3, the permittee does not burn any hazardous waste according to Ms. Ramsdell. Per SC 1.4, the permittee does not use any asbestos tailings or waste materials containing asbestos in EU-001, according to Ms. Ramsdell. Per SC 1.5, according to Ms. Ramsdell, based on a monthly average, the maximum percent reclaimed asphalt pavement (RAP) material in the asphalt mixture in EU-001 is 50%. Per SC 1.6, according to Ms. Ramsdell, the limit of the activated tire rubber (ATR) content of the liquid asphalt cement used in EU-001 is 15%.

Per SC 1.7, the permittee provided a record of HMA paving materials processed in EU-001 per 12-month rolling period. From June 2019 to May 2020, the 12-month total HMA produced in EU-001 was 222,869 tons that was below the 12-month limits of 600,000 tons.

Per SC 1.8, the permittee provided a record of HMA paving materials processed in EU-001 per hour based on daily average.

Process/Operational Limits

Per SC 1.9, the permittee maintains the Compliance Monitoring Plan (CMP) for RUO in EU-001. Per SC 1.10, the permittee has a fugitive emissions control plan for EUYARD.

Per SC 1.11, the permittee maintains the efficiency of the EU-001 drum mix burners, by fine-tuning the burners for proper burner operation and performance, to control CO emissions. The permittee provided CO reading and emissions record for the month of May 2020.

Per SC 1.13, the permittee shall not operate EU-001 unless the fabric filter dust collector is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the fabric filter dust collector requires a pressure drop range between 2 and 8 of water column. At the time of inspection, I observed the fabric filter dust collector. I reviewed the record of the fabric filter dust collector pressure drop range sent by Ms. Ramsdell from May 13, through July 17, 2020 and found the pressure drop range of fabric filter was in between 2 and 8 of water column.

Testing

As required in SC 1.14, according to last inspection on August 14, 2015, conducted by AQD inspector, Francis Lim, verification and quantification of odor emission rates were conducted on September 11, 2002.

As required in SC 1.15, according to last inspection on August 14, 2015, conducted by AQD inspector, Francis Lim, Carbon monoxide emission rate was verified through a stack test on September 6, 2002. Sulfur dioxide emission rate was verified through a fuel oil sampling done on September 6, 2002.

Monitoring

Per SC 1.17, the permittee keeps records and monitor the virgin aggregate feed rate and the RAP feed rate to EU-001 continuously. The permittee provided the record for the month of May 2020. I reviewed the records and found that the permittee records and monitor the virgin aggregate feed rate and the RAP feed rate to EU-001 continuously. For the month of May 2020, the monthly totals virgin feed rate and RAP feed rate were 191.81 tph and 52.76 tph respectively.

Per SC 1.18, the permittee provided CO emission record for the last 12 months beginning from June 2019 to May 2020. For more details, please see the SC 1.1f, SC 1.26 and SC 1.28.

Per SC 1.20, at the time of inspection, I observed the fabric filter dust collector. I reviewed the record of the fabric filter dust collector pressure drop range sent by Ms. Ramsdell from May 13, through July 17, 2020 and found the pressure drop range of fabric filter was in between 2 and 8 of water column.

Per SC 1.21.a and b, the permittee requires to keep record of type, amount and sulfur content of all fuel oil combusted in EU-00. According to Ms. Ramsdell, plant 4 has not combusted fuel oils in EU-001 since 2015.

Per SC 1.21.c, in the month of May 2020, the average percent of RAP per ton of hot mix asphalt produced containing RAP was 20.56% that is below the limit of 50%.

Per SC 1.22, I reviewed the daily HMA production information of May 2020. The permittee maintains the daily records of the virgin aggregate feed rate and the RAP feed rate for EU-00.

Per SC 1.23, the permittee requires to have an oil analysis report. According to Ms. Ramsdell, plant 4 has not combusted fuel oils in EU-001 since 2015.

Per SC 1.24, the permittee maintains monthly and 12 month rolling record of the criteria pollutant and TAC emissions. The 12 months total HAP emission was 5150 lbs that was below the permit limit of 44,800 lbs. The 12 months total CO emission was 22.4 tons that was below the permit limit of 60.3 tons, and total SO2 emission was 29.3 tons that was below the permit limit of 78.9 tons Per SC 1.26, I reviewed the average daily (for the month of May 2020), monthly and 12-month rolling time period (June 2019 through May 2020) records of the amount of HMA paving materials produced from EU-001. The 12 months total HMA produced from EU-001 was 222,869 tons that was below the limit of 600,000 tons.

The following conditions apply to: FGFACILITY

Emission Limits

Per SC 4.1a and SC 4.1b, the permittee has provided 12-month HAP emissions record from June 2019 through May 2020. I reviewed the record and it seems the permittee has satisfied the conditions set forth in SC 4.1a and SC 4.1b.

Per SC 4.1a, for the period of June 2019 through May 2020, 12 month rolling total at the end of each month, each individual HAP emission was less than 1 tons that is below the permit conditions of 8.9 tons per year. Per SC 4.1b, for the period of June, 2019 through May 2020, 12 month rolling as well as end of May 2020 -12 month total, aggregate HAPs emission was less than 3 tons that is below the permit conditions of 22.4 tons per year.

Stack/Vent Restrictions

Per 1.27, exhaust stack dimensions appear to be as stated in permit condition (maximum diameter is 56 inches and minimum height above ground level is 100 feet)

EUYARD

Process/Operational limits

The facility maintains and implements the Management Plan for the Control of Fugitive Dust as specified in Appendix A for all plant roadways, the plant yard, all materials storage piles, and all material handling operations.

Recordkeeping/Reporting/Notification

The facility reported their annual emissions of particulate matter for EUYARD through MAERS for 2019.

EUACTANKS

Process/Operational Limits

As required in SC 3.1 the vapor condensation and recovery system are installed and maintained for the liquid asphalt cement tank.

EUSILOS

Process/Operational Limits

Per SC 4.1, the emission capture system for the top of each storage silo is installed.

FGFACILITY

SC 5.1b, the individual HAPS for the 12-month rolling period from July 2018 through June 2019 was below the limit of 8.9 tons (attachment 5).

SC 5.1b, the aggregate HAPS for the 12-month rolling period from July 2018 through June 2019 was

2.24 tons which is in compliance with the limit of 22.4 tons (attachment 5).

Conclusion

Based on the on-site inspection, it appears to me steam and condensed vapors were coming out from the asphalt plant exhaust stack. Ace Asphalt & Paving Inc Plant 4 is in compliance with the requirements of PTI No. 194-85I.

NAME

DATE August 11, 2020

SUPERVISOR