

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Self Initiated Inspection**

N540349895

<b>FACILITY:</b> ACE ASPHALT & PAVING CO INC PLANT 1	<b>SRN / ID:</b> N5403
<b>LOCATION:</b> 16255 TINDALL RD, DAVISBURG	<b>DISTRICT:</b> Southeast Michigan
<b>CITY:</b> DAVISBURG	<b>COUNTY:</b> OAKLAND
<b>CONTACT:</b> Tom Green , Manager, Environmental Services	<b>ACTIVITY DATE:</b> 07/24/2019
<b>STAFF:</b> Shamim Ahammod	<b>COMPLIANCE STATUS:</b> Compliance
	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> Conducted a self-initiated inspection of Ace Asphalt & Paving Co, Inc. Plant 1 to determine the company's compliance with the requirements of the (PTI) No. 194-85I and to investigate a drive by complaint related to smoke from the asphalt plant exhaust stack.	
<b>RESOLVED COMPLAINTS:</b>	

On Wednesday, July 24, 2019, at 9:30 AM, Michigan Department of Environment, Great Lakes and Energy-Air Quality Division (EGLE-AQD) staff, I (Shamim Ahammod) conducted a self-initiated inspection of Ace Asphalt & Paving Co, Inc. Plant 1 located at 16255 Tindall Road, Davisburg, 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. 194-85I and to investigate a drive by complaint related to smoke from the asphalt plant exhaust stack.

#### **INSPECTION**

Previously, on June 28, 2019, at 11:50 AM, I arrived at the facility and inspected the surroundings. Later, I met with Rick Will, Plant Operator. I introduced myself to Mr. Will, showed him my credentials, provided him my visiting card and stated the purpose of the visit. However, the facility was not in operation on that day.

On Wednesday, July 24, 2019, at 9:30 AM, I revisited the facility to investigate smoke from the asphalt plant exhaust stack. On this day, the facility was in operation. I observed steam and the condensed organic vapors were coming out from the exhaust stack of the facility. I did not observe any visible emissions after the plume. Mr. Will accompanied me tour the facility. Mr. Will introduced me to David Clemens, Plant A1 operator, and Dan Dennis, Plant A1 Operator. The facility uses natural gas as fuel. The facility has not used recycled used oil (RUO) in any its operations since September 27, 2018.

#### **SOURCE DESCRIPTION:**

This facility manufactures asphalt materials and provides complete asphalt paving operations. It has a 650 tons per hour counterflow drum mixer, aggregate conveyors and fabric filter dust collector. The facility has five hot mix asphalt (HMA) paving material product storage silos and a total of seven liquid asphalt cement tanks.

#### **REGULATORY ANALYSIS & COMPLIANCE EVALUATION**

##### **EUHMAPLANT**

EUHMAPLANT consists of hot mix asphalt (HMA) facility including aggregates conveyors, 650 tons per hour Gencor counterflow drum mixer, and fabric filter dust collector.

#### **Emission Limits**

PM and CO emissions were verified through a stack test conducted on July 11-26, 2006. AQD

received the test report on November 15, 2006. NO<sub>x</sub>, lead, benzene, toluene, ethylbenzene, xylene, naphthalene, formaldehyde, acrolein, arsenic, nickel, manganese, sulfuric acid, and hydrogen chloride emissions testing was also done during that time period. On July 13, 2006, the Sulphur dioxide (SO<sub>2</sub>) emissions rate were verified during the stack test. The facility passed the tests.

#### **Material Usage Limits**

As required in SC 1.5, I reviewed the monthly (from July 2018 through June 2019) average RAP material mixing with the asphalt mixture process in EUHMAPLANT. It appears RAP material was used less than 50% of asphalt mixture process (attachment 1).

Per SC 1.6, 12-month HMA production limit is 985,000 tons. Permittee produced 253,604 tons of HMA paving materials in EUHMAPLANT per 12-month rolling time period from July 2018 through June 2019 (attachment 2).

Per SC 1.7, I reviewed daily/hourly HMA production information for the last 12 months. It appears the facility did not process more than 650 tons of HMA paving materials in EUHMAPLANT per hour based on a 24-hour rolling period (attachment 1).

#### **Process/operational Restrictions**

Per SC 1.9, the permittee maintained the fugitive emissions control records for EUYARD Specified in Appendix A. I reviewed the fugitive emissions control records for EUYARD. As required in SC 1.10, the burner was tuned-up on 4/12/2019 and 4/30/2019 (attachment 8). Per SC 1.11, the permittee maintains an acceptable plan that describes how emissions will be minimized during all startups, shutdowns, and malfunction (attachment 3). As specified in SC 1.12, the permittee installed a fabric filter dust collector in EUHMAPLANT. From July 2018 through June 2019, I reviewed the record of the pressure drop of baghouse that was 4 inches of water column (attachment 4). The permit requires a pressure drop range between 2 and 8 inches of the water column.

#### **Testing**

Per SC 1.13, verification and quantification of odor emission rates were conducted on September 11, 2002. This modified permit did not require new odor testing. Per SC 1.14, verification and quantification of toxic air contaminants were conducted during the June 11-26, 2006 stack test.

Per SC 1.15, particulate matter (PM) emission rate was verified through the stack test on July 11-12, 2006. Carbon monoxide (CO) and Sulfur dioxide (SO<sub>2</sub>) emission test conducted on July 13, 2006.

#### **Monitoring**

Per SC 1.16, I reviewed the daily log of virgin aggregate feed rate and RAP feed rate (attachment 1). Per SC 1.17, CO readings were taken on July 12, 17, 24, 27, August 20, Sept. 4, 15, 22, 27, Oct. 13, 16, 24, Nov. 7, 12, 28, 2018, June 19, 2019 (attachment 5). Though permittee is required to take CO reading only upon start-up of each paving season, malfunction of the drum dryer/mixer or its associated burner, and after 500 hours of operation, the permittee has taken more than CO readings they required for better burner operation and performance.

#### **SC 1.18 and 40 CFR Part 60 Subparts A & I,**

Particulate matter (PM) emission rate was verified through the test on July 11-12, 2006. The facility passed the test.

**Recordkeeping/Reporting/Notification**

Per SC 1.18, and SC 1.19, permittee keeps records of criteria pollutants (PM, CO, NO<sub>x</sub>, SO<sub>2</sub>, lead and VOC) and HAPs (attachment 6). Per SC 1.20, drum mixer and burner are maintained properly through regular CO readings. The permittee maintains all CO monitoring data include dates and time when the readings occur (attachment 6). I reviewed the baghouse maintenance records.

Per SC 1.21, the facility uses natural gas as a fuel and keeps record the total amount of gas combusted every day. I reviewed the records of the fuel usage from June 2018 through June 2019. The permittee did not use RUO as fuel in last 12 month (attachment 7).

Per SC 1.22, permittee records the virgin aggregate feed rate, RAP feed rate and asphalt paving material temperature in the daily log. The usage of the following components is also recorded in the daily log: liquid asphalt cement, RAP, different types of sand and gravel. Hot mix asphalt products are samples and analyzed and adjusted during manufacturing as necessary. Daily log on Friday, 6/28/2019 is attached to this report (attachment 1). I reviewed the last 12 months (July 2018-June 2019) records of the virgin feed rate, the RAP feed rate, and asphalt paving material products temperature. It appears to me they keep record daily basis.

Per SC 1.23, Permittee provided the monthly and 12-month rolling time period (June 2018-July 2019) emissions records of all criteria pollutants and HAPs (attachment 6). Per SC 1.24, permittee records CO emissions (lb/ton) on a daily basis (attachment 5). Per SC 1.25, permittee provided the daily, monthly and 12-month rolling time period (July 2018 through June 2019) records of the amount of HMA paving materials produced from EUHMAPLANT (attachment-1). Per SC 1.26, based on my observations, the exhaust stacks appeared vertical and unobstructed. The exhaust stack dimension appears to be as stated in the permit condition.

**EUYARD****Process/Operational limits**

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

**Recordkeeping/Reporting/Notification**

The facility reported their annual emissions of particulate matter for EUYARD through MAERS for 2018.

**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.

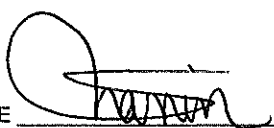
**FGFACILITY**

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 1 is in compliance with the requirements of PTI No. 194-85I.

NAME 

DATE 8/14/19

SUPERVISOR SJS