

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

N158037358

FACILITY: Ace-Saginaw Paving Company - Plant 9		SRN / ID: N1580
LOCATION: 4711 VETERANS MEMORIAL HIGHWAY, SAGINAW		DISTRICT: Saginaw Bay
CITY: SAGINAW		COUNTY: SAGINAW
CONTACT: Ben Kroeger ,		ACTIVITY DATE: 10/10/2016
STAFF: Sharon LeBlanc	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FCE for fiscal year 2017. sgl		
RESOLVED COMPLAINTS:		

On Monday, October 10, 2016, AQD District Staff arrived onsite to conduct scheduled site inspection activities at 4711 Veterans Memorial Highway, Saginaw, Saginaw County Michigan. At the referenced location was one stationary, hot mix asphalt plant, Ace-Saginaw Asphalt Plant No. 9 (ASP9) (SRN N1580).

One permit (Opt-Out Permit No. 178-87H) is associated with the ASP9 facility, with the initial permit issued on July 13, 1989 and the most recent modification approved on May 26, 2015. The referenced permit is for a 400 Ton Per Hour (tph) CMI drum mix asphalt plant able to use alternative fuels including propane, natural gas, virgin fuel oil, blender fuel oil, or specification Recycled Used Oil (RUO). Site inspection activities were conducted with the intent of confirming the operational status and compliance with the Permit to install No. 178-87H.

Mr. Corey Graveline (Plant Operator) provided a general overview of operation and practices as well as provided operational information requested as part of the site inspection activities. Supplemental records are maintained by the corporate office as part of their general business practices, and were supplied by Mr. Ben Kroeger.

FACILITY DESCRIPTION

The ASP9 facility is located at 4711 Veterans Memorial Highway, Saginaw, Saginaw County, Michigan. The facility is located along the Saginaw River, and is bounded by industrial properties.

The facility is one of two active HMA plants currently owned and operated by Edward C. Levy Company in the Saginaw Bay District. The ASP9 plant was formerly owned and operated by the Saginaw Asphalt Company. At the time of the initial permitting Saginaw Asphalt Company had HMA Plants No. 5 (SRN B2985) and No. 9 (N1580) located on property. Equipment associated with Plant No.5 has been sold/removed from site, and the associated permit(s) voided.

At the time of the inspection, the referenced permit consisted of;

- EU-0001 -a Dillman Duo-Drum Counter flow plant reported to be rated at approximately 400 tons per hour
- EUSILOS -Four 300-ton HMA silos
- EUYARD -aggregate feed bins with associated conveyors, six asphaltic cement storage tanks
- EUTANKS –Six asphaltic cement storage tanks and one diesel tank.

It should be noted that two RUO tanks located onsite at the time of the November 17, 2014, inspection have been removed from site. Two storage silos, one "hot" elevator with vapor reclaim system and one loading station are also associated with the facility

Pollution control devices associated with the facility consist of:

- Primary dust collector and bag house (installed in 2001) consistent with the previous permits.
- Upgrade in HMA drums, conveyors and controls completed in 2008-2009.

Note: The burner and baghouse are monitored continuously in the control house. The operator reported that the baghouse has a high temperature sensor with an auto shutdown of 400 degrees for the plant.

- Secondary containment for the Above Ground Storage Tanks (ASTs) onsite was installed between the July 2010 and June 2013 site visits.

The facility has not implemented warm mix asphalt production methods, though they have been implemented at some of the other Levy sites in the state. The facility does do a limited amount of crumb rubber mix asphalt. Their operator reports that the crumb comes premixed in the asphaltic cement, and that they do not mix the crumb rubber themselves. Their notice of exemption from permitting was received by the District on May 19, 2016. Only one job was reported to have been done during the present season.

The facility is a non-PSD facility, and based on readily available information it appears that the plant modifications have resulted in general decreases in emissions.

At the time of the inspection, the facilities normal operating schedule was reported to be from approximately 6:30 a.m. to approximately 4:30-5:00 p.m., 5 days a week and from April through November though actual operation will vary according to the job/work schedule and equipment conditions any given day/week. In addition, the facility reported that operations have when required been extended to include an evening shift to meet demand.

The plant is allowed by permit to operate using RUO under SC II.1. However, the facility has not operated using RUO for over 5 years, and RUO associated permit conditions have not been evaluated as part of this compliance evaluation.

COMPLIANCE HISTORY

A review of records available in District Files indicated that the last compliance inspection was conducted on November 17, 2014. As part of the referenced site visit and compliance evaluation it was noted that stack testing had been conducted for PM under PTI 178-87 (July 13, 1987) and TACS SO₂, NO_x, CO and VOCs under PTI 178-87E (October 22-24, 2002). As part of the November 17, 2014, FCE the referenced reports were evaluated and it was determined that all test parameters with the exception of naphthalene were reported in compliance with permit limits. An application for permit modification to correct naphthalene emission limits for the facility was submitted, and resulted in the most recent PTI

A review of complaint logs indicates that the last specific residential complaint regarding the plant was in 2009. No residential complaints have been received since that time, and may well be result of the facility upgrade completed in 2009.

Annual emissions are submitted in a timely manner, and emission levels reported appeared to meet the permit requirements.

COMPLIANCE EVALUATION

Operational Status – Upon arrival the ASP9 facility was noted to be operating, with trucks being loaded from the silos. The one front end loader transported materials (including RAP) from various material stockpiles onsite to aggregate hoppers in what appeared to be a continuous process for the duration of the inspection.

At the time of the site visit, the facility was operating at a production rate of approximately 317 tons per hour (with a set point of 325 tons per hour), which is well below the maximum permitted capacity of 400 tons per hour (based on a daily average)(SC II.6).. The mix being produced at the time was reported to be a 36-13A mix. The mix temperature was reported to be 344 °F.

Records indicate that the plant began operation for the years 2015 and 2016 on April 23, 2015 and May 6, 2016, respectively. The plant operator reported that barring equipment or other problems that they had been operating for 10-12 hours per day, 5 days per week, and were anticipating operating until the normal season shut down in mid-November.

Material Usage Rates – Production at the facility is order driven. Production to date for the season was reported to be less than 100,000 tons. SC II.5 limits production to no more than 595,000 tons per 12-month rolling time period. Production records for the facility indicated that production for 12-month rolling periods for 2015 and 2016 were in compliance with permit requirements.

Virgin aggregate feed rates (207 tph), RAP feed rates (100 tph), asphaltic liquid feed rates(17.8 tph), HMA temperatures (344 degrees F), differential pressures (2.62 inches) and other operational and material use information/data is monitored continuously at the facility (SC 1.16), and a daily report is generated for submittal. Daily usage reports indicating the various mix codes, material components of the produced mix by the ton, and total tons produced are submitted to the main office. Hard copies of all daily use reports for the ASP9 facility operating season were kept in a file cabinet in the control room by the plant operator.

RAP usage is limited by permit to a maximum monthly average of 50% (SC 1.5). RAP use is reported to vary based on mix in production, and is order specific. At the time of the site inspection, the mix was running 31.5% RAP. No exceedances of the RAP monthly average limit was noted during record reviews for 2015 and 2016.

The plant operator reported that no asbestos shingles or other asbestos containing materials were used in their production, which meets requirements of SC II.4.

Though permitted to use RUO, the facility no longer utilizes that fuel option, instead operating on NG. (SC II.1) At the time of the November 17, 2014 site inspection the facility had not operated using RUO for approximately 4 years.

Operational Parameters – At the time of the inspection, the ASP9 facility was operating at approximately 317 tons per hour, and producing a 36-13A mix with liquid asphalt at a rate of approximately 17.8 tons per hour. The mix temperature was reported to be 344 °F.

PTI 178-87H, SC IV.1 requires installation, maintenance and operation of a fabric filter dust collector in order to operate the HMA. The same condition identifies the acceptable differential pressure drop range of between 2 and 8 inches of water column for satisfactory operation of the unit. At the time of the October 11, 2016, inspection the differential pressure drop was 2.62 inches of water.

Process/Operational restrictions associated with the above referenced PTI include implementation of the following documents:

- Fugitive Dust Control Plan (Appendix A of PTI) (SC III.1)
- Preventative Maintenance Program for the fabric filter dust collector (Appendix B of PTI)(SC III.2)
- Startup-Shutdown and Malfunction Plan (III.3)

Based on information reviewed and discussions with the HMA Plant operator it appears that the facility is operating in general compliance with their Fugitive Dust Control Plans and Preventative Maintenance Program for the fabric filter dust collector. The most recent inspection being reported as a black light inspection of the bag house on September 21, 2016.

In addition, the permittee is required to fine tune the burner for proper operation at the start of each paving season or upon a malfunction of the HMA Plant. (SC III.5) SC VI.3 requires that the CO be monitored with a handheld monitor when fine tuning the burner as well as after 500 hours of burner operation. Other burner and drum maintenance activities are conducted as part of their general maintenance program, and are conducted generally in the off season. Records provided confirm general compliance with burner monitoring and maintenance requirements under the PTI.

The general permit for the facility requires the submittal to AQD of an acceptable plan describing how emissions will be minimized during all startups, shutdowns and malfunctions (SC 1.11). A plan dated August 26, 2010 may be found on file at the District office.

A vapor condensation and recovery system for the above ground tanks (EUACTANKS SC III.1), as indicated in previous inspection reports, the emission capture system had been installed, and is operating properly. Confirmation of the operation of the vapor condensation and recovery system installation was completed through the main office.

Emission Point – Multiple emission sources exist with respect to the facility these sources consist of the HMA plant and fugitive dust from stockpiles and roadways. Asphalt vapors generated during the process and loading are collected and reintroduced into the burner. Particulate Matter (PM) generated during process is collected through both a primary collector (knock out pot) and a secondary collector (bag house) with associated stack. Collected PM materials are reclaimed and re-introduced in the asphalt production process.

Monitoring and Testing –Verification and quantification of odor emissions (SC V.1) may be required for EU001. However, no request for such testing is of record in district files.

CO emissions are reported to be monitored with a hand held device prior to the start up of each paving season, then every 500 hours or after a malfunction (whichever comes first) (SC VI.3). Records indicated that the most recent event had occurred on May 6, 2016. Documentation of the activities was recorded on the daily logs and that CO monitoring activities were being conducted in general compliance with the permit conditions.

Record Keeping and Reporting –Under Permit to Install 178-87H requirements for record keeping and reporting included:

- Intermittent daily records of virgin aggregate feed rate, RAP feed rate, asphalt paving material product temperature and information sufficient to identify all components of the asphalt paving mixture. (SC VI.7)
- HMA mix design and time of start-up for each mix shall be recorded and kept on file until the end of the paving season. (SC VI.7)

As previously indicated feed rates and operational parameters are monitored continuously on the control screen with daily summary logs printed out and submitted to corporate. A review of the onsite records indicates that the information required to meet the above referenced record keeping and recording requirements has been met. A minimum of one year of the referenced records are stored onsite, with copies and additional year's records reported to be available for review at the main office.

Records of all significant maintenance activities conducted and significant repairs made to drum mixer/burner and fabric filter dust collector (EU001) (SC VI.5). In addition records for the fabric filter dust collector are to be consistent with the Preventative Maintenance program outlined in Appendix B of facilities general permit (SC VI.5) These records are completed on daily log sheets, and submitted to the main office for addition to the company's records database. In addition this database contains the following records:

- Records of all CO emissions and related production data including the dates and times of emissions monitored. CO emission data will be used to ensure proper operation of the drum dryer or associated burner. (SC VI.9)
- Monthly records of type and amount of all fuel oils combusted, sulfur content by weight, specific gravity, flash point and their higher heating values. (SC VI.6)
- Average daily, monthly and 12-month rolling time period records of the amount of HMA paving material produced from EU001. (SC VI.6 & 10)
- Monthly records of tons of HMA produced containing RAP and the average percent of RAP per ton produced for HMA (SC VI.6).
- Monthly and 12-month rolling time period emission calculations of all criteria pollutants and HAPs listed in the Emission Limit Table for EU001 (SC VI.8) and FGFACILITY (SC VI.2)

The general permit for the facility requires that calculations for emissions referenced above be made available by the 15th of the calendar month for the previous calendar month. In addition, the general

permit requires the facility to maintain copies of all records and calculations on file for a period of at least 5 years.

In addition to the above identified record requirements, the general permit requires the calculation of the annual fugitive dust emissions of particulate matter for EUYARD (SC VI.2) and the actual emissions of HAPs from FGFACILITY (SC 5.2). A review of district files indicated that timely annual MAERS submittals have been made for the facility. The most recent being for the 2015 calendar year.

SUMMARY –

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The facility was operating upon arrival. Operational parameters and material usage rates are monitored continuously on the control screen, with summary sheets/logs printed out and submitted daily. Review of select daily log sheets, as well as data summary spreadsheets indicated that the ASP9 facility is in compliance with appropriate monitoring, recordkeeping, and associated monthly and 12-month rolling emissions/emission limits as outlined in PTI 178-87H. No compliance issues were noted. sgl

NAME Sharon G. Blane DATE 12/5/16 SUPERVISOR C. Dore