

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

N727149834

FACILITY: PYRAMID PAVING & CONTRACTING		SRN / ID: N7271
LOCATION: 325 N. FAIRVIEW, WEST BRANCH		DISTRICT: Saginaw Bay
CITY: WEST BRANCH		COUNTY: OGEMAW
CONTACT: Bruce Weiss , President		ACTIVITY DATE: 08/07/2019
STAFF: Meg Sheehan	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled site inspection for FY19. The facility was in violation of SC III.5, III.7, VI.3, and VI.9 under EUHMAPLANT, SC III.1 under EUSILOS, and SC III.1 under FGFANKS of PTI No. 149-03D.		
RESOLVED COMPLAINTS:		

On August 7, 2019, a scheduled site inspection was conducted by AQD district staff at Pyramid Paving & Contracting in West Branch, Ogemaw County. Mr. Dave Chaffin (QA/QC Certified Technician) was onsite to answer questions. Site inspection activities were conducted with the intent of confirming compliance with Permit to Install (PTI) No. 149-03D. The facility was open, and the permitted activities were in operation at the time of the inspection.

FACILITY DESCRIPTION

Pyramid Paving is a hot mix asphalt (HMA) plant and is an existing synthetic minor source. The facility is located at the Glancy Sand & Gravel Pit (SRN N6355), approximately three miles north of West Branch. Another HMA plant, owned and operated by Bolen Asphalt Paving, Inc. (SRN B4164) is also located at the Glancy Pit. The address submitted with the original PTI application is listed as 325 North Fairview Road. However, according to Google Earth, Pyramid Paving is located at the end of Number 250 Road, which runs east from South Fairview Road. The Glancy Pit is bordered by both large and small privately-owned tracts. Those immediately to the south of the HMA plants include residential properties.

FACILITY HISTORY

PTI No. 149-03D was approved on July 20, 2011, but the facility was originally permitted in 2003 under PTI No. 149-03. Since then, the facility modified their permit in 2004, 2005, 2010, and 2011. The June 16, 2010 permit modification (149-03C) expanded permitted fuels to allow for slurry oil in addition to the previously approved No. 2 through No. 4 fuel oils, natural gas and propane. The July 20, 2011 permit modification (149-03D) expanded the approved fuels to include recycled used oil (RUO). The approved RUO was only used onsite for a limited time, due to changes in costs and sources.

Most recently, a temporary permit was approved for the facility on May 30, 2018, for the 2018 paving season (149-03E). The temporary permit removed the operational time limits in Special Condition (SC) III.7 under EUHMAPLANT of PTI 149-03D, but expired on August 1, 2018 (SC IX.1, FGFACILITY, PTI 149-03E) and was voided on August 8, 2018.

No complaints are of record for the facility since 2006. The most recent site inspection was conducted on May 4, 2017, and the facility was not in compliance at that time. A violation notice (VN) was issued on July 12, 2017 for failure to conduct the drum mix burner tune-up required by SC III.5 (EUHMAPLANT) and for CO monitoring that did not meet the dataset criteria required by SC VI.3 (EUHMAPLANT). The VN was resolved on August 7, 2018. The facility is required to report to MAERS and has done so in a timely manner since 2008.

EQUIPMENT

Pyramid Paving is a permanent, counter flow drum mix asphalt plant rated per the permit at 300 tons per hour. The plant consists of: a counter flow, dual-drum system; control house; fabric filter dust collector (baghouse); two HMA silos (EUSILOS) with partially enclosed truck load-out; two asphaltic concrete storage tanks (EUACTANK1 and EUACTANK2); fuel tanks (EUFUELOILTANK, EUSLURRYOILTANK, and propane tank); and aggregate feeders and associated conveyors.

COMPLIANCE EVALUATION

Fabric Filter Dust Collector

SC IV.1. (EUHMAPLANT) requires the installation, maintenance, and satisfactory operation of a fabric filter dust collector (baghouse), and SC VI.11 requires the installation and operation of a device to monitor the pressure drop across the fabric filter. Satisfactory operation requires a pressure drop range between 3 and 6 inches of

water column, with a minimum pressure drop of 2 inches. A baghouse has been installed and the pressure drop is continuously monitored from the control house and recorded once per operating day on the Weekly Plant Operating Report. The pressure drop is measured with a Dwyer Photohelic gauge which has been installed. At the time of the inspection the pressure drop was 3 inches W.C. and the baghouse appeared to be operating in a satisfactory manner.

SC III.2. (EUHMAPLANT) requires the Preventative Maintenance Program (Appendix B) for the baghouse be implemented and maintained. Mr. Chaffin indicated he conducted a black light inspection of the baghouse at the beginning of the 2019 paving season, which started on May 5 based on records provided. Inspections of the baghouse are marked on the Weekly Plant Operating Report but are not filled out in the detail that is required in Appendix B. The corporate office was informed of these additional requirements. The black light inspection equipment is kept onsite as well as replacement filter bags. Dust collected by the baghouse is mixed back into the process. Staff reported a high-temperature alarm system has been installed, with a set-point of 400 degrees F. As soon as the temperature reaches the set-point, the plant automatically begins shutting down.

Materials & Fuel

SC II.1. – II.3. (EUHMAPLANT) specify fuels allowed to be burned in the plant. Facility staff reported the plant runs solely on propane (as permitted by SC II.2) and has not fired slurry oil or RUO since before the 2017 inspection. Therefore, SC III.4. and Appendix D (Compliance Monitoring Plan for RUO) were not applicable to this inspection because the source is not currently using RUO.

SC VI.6. (EUHMAPLANT) requires monthly records regarding fuels combusted, the amount, and composition. This data is recorded on the Weekly Plant Operating Report which is sent to the corporate office for tallying. The composition of the propane fired in the plant is reported to MAERS.

SC II.4. and SC III.6. (EUHMAPLANT) prohibit the permittee from using any asbestos tailings or waste materials containing asbestos. Facility staff indicated no asbestos materials are used in the production of HMA.

RAP & HMA Production

SC VI.2 and VI.7. (EUHMAPLANT) require monitoring of the virgin aggregate feed rate and the RAP feed rate on a continuous basis with intermittent daily records. Feed rates and operational parameters (such as mix temperature) are monitored continuously on the control screen, with summary printouts at whatever interval is desired by the operator. Records are also kept for all changes in production/mix recipe, and a summary printout is made at the end of each day. The records are provided daily to the main office in Bay City. A summary printout was provided at the time of the inspection, as well as recent mix recipes. These records may be found in the district file.

SC VI.6. (EUHMAPLANT) requires monthly records regarding tons of HMA containing RAP produced and hours of operation, and SC VI.10 requires records of the average daily, monthly, and 12-month rolling time period amounts of HMA paving material produced. This data is recorded on the Weekly Plant Operating Report which is sent to the corporate office for tallying. The data is compiled into one main spreadsheet, which was provided via email by Ms. Alicia Krieger (Controller at Pyramid Paving) on August 14.

SC II.5. (EUHMAPLANT) limits the asphalt mixture to a maximum of 30 percent recycled asphalt material (RAP) on a monthly average, and SC II.7 limits the amount of HMA paving materials processed to 300 tons per hour based on a daily average. Based on records that were provided during the inspection, the facility appears to be in compliance with these conditions.

SC II.6. (EUHMAPLANT) limits the amount of HMA paving materials processed to 250,000 tons per 12-month rolling time period. Emission and production records were included in the August 14 email. So far for 2019, the plant has processed 69,462 tons of HMA materials. In 2018, the plant processed 102,285 tons. Based on a 12-month rolling time period, the plant appears to be in compliance with this condition.

Dust

SC III.1. (EUHMAPLANT) requires the Fugitive Dust Control Plan (Appendix A) be implemented and maintained. The roads were paved with 10 mph signs posted throughout the site. Trucks with full loads were covered and there did not appear to be any aggregate spillage on the roads near the pit entrance. Roads closer to the plants have been covered with pea-gravel or sands resulting from heavy rains, truck traffic and elevation differences onsite. Fugitive dust did not appear to be an issue at the time of the inspection. Dust control activities are marked on the Weekly Plant Operating Report, however it should be noted the facility primarily relies on rain for dust control. The corporate office was informed of the additional requirements in Appendix A.

SC VI.1., VI.2. and VII.1. (EUYARD) require fugitive emission records be maintained and calculated using AP-42 or MAERS emission factors, and annually reported to MAERS. As previously stated, the source reports to MAERS in a timely manner every year, and reports fugitive emissions from EUYARD. Pyramid's 2018 MAERS report was audited by AQD staff and appeared to be accurate and remain consistent with previous year submittals.

Operational Requirements

SC III.7. (EUHMAPLANT) requires the permittee to operate the plant only between the hours of 5:00 am and 6:00 pm. Based on records that were provided during the inspection, it appears the facility operated outside of these hours on several occasions for the 2019 paving season. It should be noted that this condition was temporarily removed in PTI 149-03E for the 2018 paving season, but that PTI expired on August 1, 2018. Therefore, the source is in violation of this condition. SC III.8. requires the permittee to operate the plant only between April 15 and November 30. Based on records that were provided during the inspection, the facility appears to be in compliance with this condition.

SC VIII.1. (EUHMAPLANT) specifies one stack with a maximum exhaust dimension of 54 x 54 inches and a minimum height above ground of 50 feet. The stack appeared to meet these requirements. Some visible emissions were noted coming out of the stack, but a Method 9 survey was not conducted because AQD staff determined they were well below 20% opacity. The facility does have Method 9 certified staff onsite that conduct visible emissions observations on days of operation.

SC IX.1. (EUHMAPLANT) specifies the criteria that must be met for the plant to move to any new geographical site in Michigan. At the time of the inspection, the plant was in a permanent location. Therefore, this condition is not applicable. SC III.3. also requires the source to operate under the Emission Abatement Plan for Startup, Shutdown and Malfunctions (Appendix C).

CO Emissions Monitoring

SC III.5. (EUHMAPLANT) requires fine tuning of the drum mix burners to control CO emissions at the start of each paving season or upon malfunction of EUHMAPLANT as shown by the CO monitoring data. Staff reported the drum mix burners had not been tuned for the season at the time of the inspection. CO monitoring had also not been conducted at the beginning of the season or after 500 hours of plant operation (as required by SC VI.3 and VI.9). The corporate office was notified of these violations on August 8. Records received on August 14 indicated the drum mix burner had been tuned on August 11. Because the tuning is required at the beginning of the season (which started on May 5 this year) and was not conducted until August, a violation notice will be issued.

Testing

SC V.1. through V.3 (EUHMAPLANT) require testing of odor emissions, TACs, PM, CO, SO₂, NO_x, Lead and HAPs if requested by the department. Compliance emission testing was conducted by Network Environmental, Inc. on August 24 – 27, 2004, to comply with conditions under PTI No. 149-03A. At that time, the plant was reported to be operating at approximately 210 tons per hour of HMA and was firing RUO. Pollutants that were tested for included arsenic, lead, manganese, nickel, formaldehyde, acrolein, benzene, ethylbenzene, toluene, xylene, naphthalene, sulfuric acid and PM. The results of the testing appeared to be in compliance with permitted emission limits under the referenced permit and under PTI No. 149-03D. No other requests for testing are of record.

40 CFR Part 60, Subpart I

SC VI.4. (EUHMAPLANT) requires monitoring emissions and operating information in accordance with 40 CFR Part 60, Subparts A and I for the plant. Subpart I requires PM testing pursuant to Subpart A, and limits the opacity from the stack to 20%. As previously stated, the source conducted PM testing in 2004, and there are Method 9 certified staff at the plant.

Records and Reporting

SC VI.5. and VI.12. (EUHMAPLANT) require maintenance to keep the drum mixer/burner, baghouse, and all other parts of the plant operating in a satisfactory manner. The conditions also require a log of all significant maintenance activities and repairs be maintained. Mr. Chaffin indicated maintenance is performed on the plant as needed, but a log of maintenance activities was not available at the time of the inspection. Maintenance records and receipts of service were provided in the August 14 email.

SC VI.8. (EUHMAPLANT) requires monthly and 12-month rolling time period emission calculation records of all criteria pollutants and TACs listed in the Emission Limit table of the PTI. SC VI.2. – VI.3. (FGFACILITY) require monthly and 12-month rolling time period emission calculations for individual and aggregate HAP emissions. The production and emissions spreadsheet that was provided by Ms. Krieger on August 14 included all these emission calculations. Emission factors used either came from MAERS (for criteria pollutants) or from the 2004 stack testing (for TACs and HAPs). Based on the information provided, the source appears to be in compliance with the emission limits in the permit.

SC VII.1. (EUHMAPLANT) requires the permittee to notify the AQD District Supervisor within 30 days after completion of the installation authorized by the PTI. With the permit having been issued in 2011, this condition was not applicable to this inspection.

Silos

SC III.1. (EUSILOS) requires an emission capture system be installed, maintained, and operated for the top of each storage silo. At the time of the inspection, AQD staff noticed visible emissions coming from the top of the silos, which indicated the emission capture system was either not operating properly, or not installed. When questioned, facility staff indicated they were not familiar with such a system having been installed. In an email and phone call with Mr. Bruce Weiss, President of Pyramid Paving & Contracting, he also indicated the system had not been installed. The source is in violation of this condition.

SC III.2. (EUSILOS) requires all load-out activities to occur in an area which is permanently enclosed except for truck entrance and exit points, with emissions collected from the area vented into the burning zone of the plant. The load-out area is enclosed on both sides, with openings for truck entrance and exit. At the time of the inspection, load-out activities were occurring and AQD staff noticed significant quantities of fugitive emissions being generated. Facility staff indicated the plant was currently being electrically re-wired, and that the capture fan was not operating. They anticipated the fan back up and running within a few weeks, after having been non-operational for a few weeks prior to the inspection. Parts of the load-out enclosure were also missing or damaged. The corporate office was notified of these issues on August 8. In the August 14 email, a photograph was provided showing the load-out area had been repaired. Ms. Krieger also indicated the fans were back up and running. The source was in violation of this condition at the time of the inspection but has since taken steps to correct the problems. A follow-up inspection should be conducted to verify compliance with this condition.

Tanks

SC III.1. (FGTANKS) requires a vapor condensation and recovery system be installed, maintained and operated for the permitted tanks. Facility staff indicated they were not familiar with such a system being installed. In an email and phone call with Mr. Weiss, he also indicated the system had not been installed. The source is in violation of this condition.

COMPLIANCE DETERMINATION

At the time of the inspection, the source was not in compliance with the following conditions: SC III.5, III.7, VI.3 and VI.9 under EUHMAPLANT, SC III.1 under EUSILOS, and SC III.1 under FGTANKS. A violation notice will be issued. The rest of the plant appeared to be in general compliance with PTI No. 149-03D.

NAME Meg Sheehan

DATE 8/19/19

SUPERVISOR C. Vore