

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

B148526847

FACILITY: PYRAMID PAVING & CONTRACTING CO		SRN / ID: B1485
LOCATION: 1503 PINE ST, ESSEXVILLE		DISTRICT: Saginaw Bay
CITY: ESSEXVILLE		COUNTY: BAY
CONTACT: Dee Welchi, Controller		ACTIVITY DATE: 09/02/2014
STAFF: Sharon LeBlanc	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: scheduled inspection- plant inspected 9/2/2014 and additional record review conducted 9/10/2014.		
RESOLVED COMPLAINTS:		

On Tuesday, September 2, 2014, AQD District Staff arrived onsite to conduct a scheduled site inspection for Pyramid Paving and Contracting Company (Pyramid) Essexville, Michigan Facility (B1485). The facility is a permitted Hot Mix Asphalt (HMA) plant operating under Permit To Install (PTI) 260-81B which was approved on May 19, 1997.

This facility is a synthetic minor opt out facility located at 1503 Pine Street, Essexville, Michigan. (Map in file) The inspection of the Pyramid plant was conducted with the intent of confirming operational status as well as compliance with the referenced permits. Upon arrival, District Staff met with Kevin Schalk, the plant operator regarding operations. Records review was conducted with Ms. Dee Welchi, at the Pyramid Paving, Bay City Office on September 10, 2014.

#### FACILITY DESCRIPTION

On the east side of Pine Street, the facility is located in an area of Essexville, that consists of a small band of industrial/commercial facilities along the Saginaw River, surrounded by a mix of commercial and residential properties.

The HMA plant is a parallel flow drum mix asphalt plant rated per the permit at 300 tons per hour. The plant consists of a single, parallel-flow drum system (installed in April 1997), control house, primary pollution control device (knock out pot), bag house, three HMA silos with truck load-outs, asphaltic concrete storage tanks, aggregate feeders and associated conveyors, and assorted storage buildings/trailers. The bag house was reported to contain approximately 742 fabric filter bags, with spares kept onsite for unscheduled repairs.

Note that the facility had sent in notification of their intent to install warm mix water injection equipment, and produce warm mix asphalt at this facility. However, the operator reported that the results of trial operations were not to the company's satisfaction, and that the equipment was not being used.

#### COMPLIANCE EVALUATION

##### Operational Status –

The facility records indicated that the plant was operating in compliance with SC 19 limits plant operation to no more than 12 hours a day nor 2,160 hours per year. Only a total of 72 days of operation were reported for the season to date. Total hours of operation reported as part of the MAERs submittal for the facility were reviewed for the past 4 years and were in compliance with permit limits.

##### Material Usage Rates –

At the time of the inspection Mr. Schalk reported that they were producing a 41-13A MDOT mix at a rate of 236 tons per hour. Production reported a liquid asphalt rate of 13.6 tons per hour and a feed rate for the virgin aggregate was reported to be 170-180 tons per hour and the feed rate for the recycled asphalt (RAP) was 35 ton per hour (apx 15% of mix).

Feed rates and operational parameters are monitored continuously on the control screen, with summary printouts printed out in intervals set by the operator. Records are also reported to be kept for all changes in production/mix. The active permit for this site does not require maintenance of production records for this facility.

Materials for production consisted of stockpiles of various grades of sand and gravel, stored on site and produced/purchased onsite. No asbestos containing materials are reported to presently be used. Materials are transported from onsite stockpiles to the aggregate feed bins and transported by conveyor to the HMA drum. Material usage rates were controlled from the control building, and daily production data/records are maintained onsite and were viewed as part of this inspection.

The facility was reported to operate on natural gas. A review of the permit indicates that the documentation of fuel consumption rates are not required for compliance under the present permit.

#### Operational Parameters –

At the time of the inspection, the facility was operating at a rate of approximately 236 tons per hour. The mix temperature was reported to be 294 °F. As previously indicated feed rates and operational parameters are monitored continuously on the control screen, with summary printouts. Records are provided daily to the main office in Essexville. Summary printouts are maintained onsite for the season.

The primary collector and bag house were installed and operating at the time of the inspection. (SC 15) The differential pressure for the bag house is monitored continuously during operation, in compliance with the permit. (SC 16),

#### Emission Point –

The primary emission points identified during the onsite inspection included the bag house stack (PM), the truck load out area (volatiles), and the drop point between the hot mix asphalt conveyor and silo and the material silos (volatiles). The stack was unobstructed, and estimated by the Pyramid staff to be approximately 50-ft high and approximately 4.5 by 4.5-feet in diameter. (SC 18) The plume coming from the bag house was a slightly grayish-white, continuous (previously reported to be detached), and appeared to be steam associated with the hot asphalt production. No tail off or fall out was noted. VE observations are conducted daily by VE certified staff. VEs of less than 20% were reported.

Some occasional, darker emissions (<10% opacity) were noted at the top of the silos and at the truck load out areas, but dissipated quickly, and did not move outside of the immediate location. The referenced emissions were below limits set under SC 14. Pyramid staff reported that an emission capture system was in place for the load-out area, having been installed previous year with loads tarped after the vehicle pulled out of the loading area. No strong asphalt odor was noted during the site inspection.

Other minor emission points existing at the aggregate feed/conveyor location (dust). No fugitive dust from the aggregate feed or conveyors was noted during the short operation period during the site inspection. A fugitive emission control program (SC20) was specified in Appendix A of PTI 260-81B and it's components are referenced in other sections of this report.

No emissions were noted coming from the drums themselves. Dust collected from the bag house was reported to be returned/blown into a silo for use in the HMA plant mix. No off site disposal is required. (SC17)

During the site inspection, loads were observed to be tarped/covered after pulling out of the load out area. (SC 20 fugitive dust plan, Appendix A)

#### Monitoring and Testing –

SC 21 requires verification of particulate and visible emission rates within 60 days after achieving the maximum production rate. District Files contain a copy of the final report for the emission testing dated October 27, 1987. However, no copy of the testing conducted following the 1997, facility upgrade is available. As a result the facility conducted the required testing on July 17, 2013, to meet permit conditions.

SC 14 limits visible emissions from the HMA plant to no greater than a 6-minute average of 20% opacity, except as specified in Rule 301(1)(a). As noted previously VE observations are conducted daily by certified VE observer daily during periods of operation. VEs reported and reviewed to date for the present season were in compliance with the opacity limit.

No other monitoring or testing was required under the active permit for the site.

#### Prevention and Maintenance Plans –

PTI 260-81B SC 20 requires implementation of fugitive emissions per the control plan prior to operating the plant. Components of the referenced plan (Appendix A of the referenced permit) include: plant maintenance, yard maintenance, storage piles and trucks. With reference to plant maintenance, Pyramid staff reported that the visual emissions from the stack are monitored daily for problems. The bag house is inspected every spring as part of the scheduled maintenance, as well as weekly and monthly during the present operating season. Written records of inspection and repairs are maintained onsite, and are submitted to the main office located offsite.

With respect to yard maintenance activities Pyramid staff reported that the trucks and equipment travelling yard roads were required to travel below 10 mph. The referenced fugitive dust plan for the facility specified a not to exceed speed of 8 miles per hour. Plant roadways in general were well maintained, and no fugitive emissions were noted during the site inspection. Brining was reported to be conducted approximately monthly during the season.

With respect to the storage piles, all trucks coming to or leaving the facility carrying sand or stone are reported to be covered. However, no trucks carrying the referenced materials were noted during the site inspection. Stockpiles were maintained at such a height that control of fugitive dust could be conducted. Freefall of materials being stockpiled appeared was minimized. In addition, as previously indicated all loads leaving the facility were tarped/covered immediately upon leaving the truck load-out area.

#### Record Keeping and Reporting –

Under PTI 260-81B requirements for record keeping and reporting included:

- A written log of the hours of operation to be kept on file for a period of at least two years, (SC 19)
- Bag house inspection and repair records (SC 20, Appendix A), and
- Documentation of chloride or brine applications (SC 20, Appendix A)

As previously indicated feed rates and operational parameters are monitored continuously on the control screen, with summary printouts. The operator reported that written logs for the hours of operation are stored onsite for the season, with copies and additional year's records available for review at the main office. Records regarding bag house inspection and repair as well as chloride or brine applications are kept as part of the daily logs, which are ultimately maintained at the main office.

#### Summary –

On Tuesday, September 2, 2014, AQD District Staff arrived onsite to conduct a scheduled site inspection for Pyramid Paving and Contracting Company (Pyramid) Essexville, Michigan Facility (B1485). The facility is a permitted Hot Mix Asphalt (HMA) plant operating under Permit To Install (PTI) 260-81B which was approved on May 19, 1997.

The facility was operating upon arrival. An emission capture system was reported to have been installed the previous year for the load-out area. Information reported during site inspection activities and records review indicated that general operation and material use was in compliance with the referenced permit. sgl

NAME

Sharon A. Wilson

DATE

9/1/14

SUPERVISOR

C. Kace