

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

P020654621

FACILITY: Molon Asphalt Inc.		SRN / ID: P0206
LOCATION: 18695 HONOR HWY, INTERLOCHEN		DISTRICT: Cadillac
CITY: INTERLOCHEN		COUNTY: BENZIE
CONTACT: Mike Foster,		ACTIVITY DATE: 07/01/2020
STAFF: Caryn Owens	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled Inspection and Records Review		
RESOLVED COMPLAINTS:		

On Wednesday, July 1, 2020 Caryn Owens of the Department of Environment, Great Lakes, and Energy (EGLE) – Air Quality Division (AQD) conducted a scheduled field inspection and records review of Molon Asphalt (SRN: P0206) located at 18695 Honor Highway, Interlochen, Benzie County, Michigan. The field inspection and records review were conducted to determine compliance with permit to install (PTI) No. 19-11B. The facility is currently classified as a minor source, however, the facility has opted out of major source applicability by limiting operational and production potential to emit (PTE) below major source thresholds, so will be classified as an opt-out facility in the future. The facility is subject to New Source Performance Standards (NSPS) of Performance for Hot Mix Asphalt Facilities under 40 CFR, Part 60, Subpart I. AQD was accompanied by Mike Foster, the Plant Operator, during the inspection.

Summary:

The activities covered during the field inspection and records review for the facility indicate the facility is non-compliant with PTI 19-11B. Specific permit conditions that were reviewed are discussed below.

On-site Inspection:

During the field inspection the weather conditions were sunny, with variable-calm winds about 5 miles per hour, and approximately 80 degrees Fahrenheit. The facility is a hot mix asphalt (HMA) batch plant that produces approximately 170 tons of asphalt per hour. The asphalt plant consists of a counter flow asphalt drum dryer, where the aggregate material enters a counter flow drum from the south side of the plant. Then liquid asphalt is introduced in the drum from two liquid asphalt tanks on the western portion of the plant and mixed with the virgin aggregate. The asphalt material is directed to a storage silo on the eastern portion of the plant for paving jobs. The asphalt plant was not operating during the inspection because the asphalt storage silos were full. The plant typically operates 5 days a week during the summer months. The plant shuts down during the winter months. The plant can shut down intermittently during the spring, summer, and fall if the demand is low. No visible emissions were observed during the inspections, even when the trucks were loaded with the asphalt material. The plant uses 4 aggregate bins, and does not use reclaimed asphalt pavement (RAP) material or recycled asphalt shingles (RAS). The HMA silo was at 300 degrees Fahrenheit. According to Mr. Foster, the dust collected from the baghouse are re-routed back to the drum to be reintroduced in the process. Mr. Foster also indicated that fuel oil is not used at the plant, also the inlet temperature of the baghouse is approximately 285 degrees Fahrenheit and the outlet is a little cooler, and the pressure drop is typically between 3.4 and 3.6 inches water column.

PTI Records Review

EUHMAPLANT: This Emission Unit is for a HMA plant including: Aggregate conveyors, 170 ton per hour counter-flow drum dryer with a RAP collar. Binder (liquid asphalt cement) is added in a pugmill which empties into a drag conveyor prior to the silos or directly to a load out bin when the plant is portable. Fuels: natural gas, propane, No. 1 through No. 6 fuel oils, recycled used oil (RUO). The emission unit is controlled by a fabric filter dust collector.

Emission Limits: AQD reviewed MAERS for the year 2019 and carbon monoxide (CO) was at 4.59 tons per year, which were within the permitted emission limits of 30 tons per year. AQD did not receive emission limit records with regards to PM, and performance testing has not been completed at the facility, so it is unknown if the particulate and CO emissions are within their permitted emission limits. The facility has not met the permitted limits of CO and PM with regards to PTI 19-11B.

Additionally, the facility has emission limits based on emission factors determined by the amount of asphalt produced. Based on the MAERS records reviewed, the total amount of asphalt produced was 45,949 tons per year in 2019, and based on the records reviewed for this year the total amount of

asphalt produced for May 2020 was 5,714 tons per month. Since the highest amount of asphalt produced was less than 300,000 tons per year, the facility was within the permitted emission factors.

- **Materials/Fuels:** The facility burns natural gas at the facility. According to the PTI, the facility is approved to use propane No. 1 through No. 6 fuel oil, or specific RUO in EUHMAPLANT, however, this facility does not burn any oil at this time. Additionally, the facility is allowed to use a maximum of 50 percent RAP, however, the plant does not use RAP. The facility does not use any asbestos tailings or waste materials containing asbestos, including RAS. The facility appears to be in compliance with the material limits of the PTI.
- **Process/Operational Parameters:** The facility performed a preseason inspection of the baghouse and plant for proper operation and performance during the 2020 paving season.

All necessary maintenance conducted at the facility is logged into a computer system once performed. The facility follows a Fugitive Dust Control Plan, a Preventative Maintenance Program, and an Emission Abatement Plan for Startup, Shutdown and Malfunctions to maintain proper operation at the facility.

- **Design/Equipment Parameters:** Proper operation of the baghouse requires a pressure drop range between 2 and 8 inches water column ("wc). Based on the records reviewed, the baghouse pressure drops ranged between 3.2 to 6.8 "wc.
- **Testing Sampling Equipment:** Performance testing has not been completed for the facility for odor evaluation or for PM and CO emissions determination. The facility has not met the requirements of performance testing for PTI 19-11B.
- **Monitoring/Recordkeeping:** Based on the records reviewed, the facility monitors and records the virgin aggregate feed rate on a continuous basis. The records indicated that at the start of the paving season began May 5, 2020. CO emissions were not evaluated since the plant didn't have a handheld gun capable of taking readings, but they obtained one and took readings on July 23, 2020 where the highest CO emissions were 224 ppmv which was below the permitted 500 ppmv. However, since the reading was not taken at the beginning of the paving season, the facility has not met the requirements of monitoring/recordkeeping for PTI 19-11B.

The facility records the type and amount of fuel used, the amount of HMA, virgin aggregate feed rate, and the asphalt paving material temperature. The facility uses approximately 4 different asphalt mix designs. The emissions are already discussed above. Fugitive dust emissions are calculated using EPA emission factors.

Additionally, the facility logs activities of the baghouse. The dust from the baghouse is rerouted back into the drum to mix with the HMA. The plant completed black light inspections on the baghouse in April 2020. According to the records, no bags from the baghouse needed to be replaced at the beginning of the paving season.

- **Reporting:** The facility reports annual emissions to EGLE. Based on the most recent Michigan Air Emissions Reporting System (MAERS), the facility was in compliance.
- **Stack/Vent Restrictions:** Based on visible observations during the field inspection, the stack appeared to be in compliance with permitted limits.
- **Other Requirements:** The facility shall comply with all applicable provisions of the New Source Performance Standards, Standards of Performance for Hot Mix Asphalt Facilities, as specified in 40 CFR Part 60, Subpart A and Subpart I, as they apply to EUHMAPLANT. Based on records reviewed, it appears the facility still needs to complete performance testing for PM in accordance with 40 CFR Part 60, Subpart A and Subpart I.

The plant has not relocated since issuance of PTI 19-11B.

EUYARD: This Emission Unit is for the fugitive dust sources including: Plant roadways, Plant yard, Material storage piles, and Material handling operations (excluding cold feed aggregate bins)

- **Emission Limits:** There are no applicable emission limits for EUYARD.
- **Materials/Fuels:** There are no applicable material limits for EUYARD.
- **Process/Operational Parameters:** All necessary maintenance conducted at the facility is logged into a

computer system once it's performed. Based on the records reviewed, fugitive dust is monitored and recorded on a daily basis when the plant is operating.

- Design/Equipment Parameters: There are no applicable design/equipment parameters for EUYARD.
- Testing/Sampling: There are no applicable testing/sampling requirements for EUYARD.
- Monitoring/Recordkeeping: Based on the records reviewed, the facility calculates the particulate fugitive dust emissions on a monthly and annual basis, based on a 12-month rolling time period.
- Reporting: As previously stated, the facility reports annual emissions to EGLE. Based on the most recent MAERS, the facility was in compliance.
- Stack/Vent Restrictions: There are no applicable stack/vent restrictions for EUYARD.
- Other Requirements: There are no applicable "Other Requirements" required for EUYARD.

EUACTANKS: This Emission Unit is for the liquid asphalt cement storage tanks, which are controlled by a vapor condensation and recovery system.

- Emission Limits: There are no applicable emission limits for EUACTANKS.
- Materials/Fuels: There are no applicable material limits for EUACTANKS.
- Process/Operational Parameters: According to Mr. Foster, a vapor condensation and recovery system is installed, operated, and maintained on the liquid asphalt storage tank systems.
- Design/Equipment Parameters: There are no applicable design/equipment parameters for EUACTANKS.
- Testing/Sampling: There are no applicable testing/sampling requirements for EUACTANKS.
- Monitoring/Recordkeeping: There are no applicable monitoring/recordkeeping requirements for EUACTANKS.
- Reporting: There are no applicable reporting requirements for EUACTANKS.
- Stack/Vent Restrictions: There are no applicable stack/vent restrictions for EUACTANKS.
- Other Requirements: There are no applicable "Other Requirements" required for EUACTANKS.

EUSILOS: This Emission Unit is for the HMA paving material product storage silo after the pugmill and conveyor that is installed at 18695 Honor Highway, Interlochen, Michigan.

- Emission Limits: There are no applicable emission limits for EUSILOS.
- Materials/Fuels: There are no applicable material limits for EUSILOS.
- Process/Operational Parameters: According to Mr. Foster, the emission capture system at the top of each storage silo and load-out area is installed, operated, and maintained properly.

The silo load-out activities are in a permanently enclosed area, except for the truck entrance. The emissions are captured and routed back to the burn zone of the drum.
- Design/Equipment Parameters: There are no applicable design/equipment parameters for EUSILOS.
- Testing/Sampling: There are no applicable testing/sampling requirements for EUSILOS.
- Monitoring/Recordkeeping: There are no applicable monitoring/recordkeeping requirements for EUSILOS.
- Reporting: There are no applicable reporting requirements for EUSILOS.
- Stack/Vent Restrictions: There are no applicable stack/vent restrictions for EUSILOS.
- Other Requirements: There are no applicable "Other Requirements" required for EUSILOS.


FGFACILITY: This Flexible Group is for all process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.

- Emission Limits: The emissions for CO at the entire facility should not exceed 90 tons per year. AQD did not receive all the records to determine if the CO emissions were within the permitted limits. Additionally, hazardous air pollutants (HAPs) are limited below 9.0 tons per 12-month rolling time period for individual HAPs, and 22.5 tons per 12-month rolling time period for aggregate HAPs. AQD did not receive the HAP emission records. The facility has not met the emission limit requirements to show

compliance with CO and HAP emissions.

- **Materials/Fuels:** The plant is limited to 300,000 tons of HMA per 12-month rolling time period. Based on the records reviewed, the total amount of asphalt produced was 45,949 tons per year in 2019, and 5,714 tons per month for May 2020. The facility was within the permitted limits.
- **Process/Operational Parameters:** There are no applicable process/operational parameters for FGFACILITY.
- **Design/Equipment Parameters:** There are no applicable design/equipment parameters for FGFACILITY.
- **Testing/Sampling:** There are no applicable testing/sampling requirements for FGFACILITY.
- **Monitoring/Recordkeeping:** The facility should be calculating CO emissions and both individual and aggregate HAP emissions from records compiled on a monthly basis. AQD did not receive the HAP or CO records calculations from the facility. The facility has not met the monitoring/recordkeeping requirements of PTI 19-11B.
- **Reporting:** There are no applicable reporting requirements for FGFACILITY.
- **Stack/Vent Restrictions:** There are no applicable stack/vent restrictions for FGFACILITY.
- **Other Requirements:** There are no applicable "Other Requirements" required for FGFACILITY.

NAME

DATE 8-21-20

SUPERVISOR

