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

N743635683		
FACILITY: Shook Asphalt Co. Inc.		SRN / ID: N7436
LOCATION: 8281 SNOWS LAKE RD., GREENVILLE		DISTRICT: Grand Rapids
CITY: GREENVILLE		COUNTY: MONTCALM
CONTACT: Tricia Eyer , Secretary		ACTIVITY DATE: 07/26/2016
STAFF: Steve Lachance	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled Inspectio	n for FY '016. See CA_N743635683. (SLachance, 7/26	6/16)
RESOLVED COMPLAINTS:		

AQD Staff SLachance and AShaffer originally arrived at the facility at approximately 9 AM, Friday July 22, 2016 to conduct an unannounced, scheduled inspection. The facility was not open at that time (it is apparently routinely closed on Fridays), and so the same AQD staff returned at about 9:10 AM, Tuesday, July 26, 2016. Weather conditions were clear, about 75 degrees F and calm. The purpose of this visit was to determine compliance with PTI 37-05A, 40 CFR Part 60 Subpart I, and other applicable Air Quality Rules and Regulations.

# Facility Description:

Shook Asphalt (SA) is a Hot Mix Batch Asphalt Plant. Per PTI No. 37-05A, it is a Synthetic Minor Opt-Out facility limited to an overall production of 150 tons per hour hot mix asphalt (HMA) produced and 100,000 tons per 12-month rolling time period HMA materials used. Typical operations are 4 days a week, and for less than 8 hours per day, May through November. The plant has a batch capacity of 300 tons Hot Mix Asphalt (HMA).

The probable last truck of the day was exiting the plant just as AQD staff arrived on July 26, 2016. Owner Mr. Gary Shook escorted staff into the office, where the "DEQ Environmental Inspections: Rights and Responsibilities" brochure was presented and discussed with Ms. Tricia Eyer, Secretary and recordkeeper. Ms. Eyer provided access to facility records, while Plant Operator "Tom" subsequently escorted staff around the plant and discussed operations.

AQD staff reviewed all records on site; these were current, complete and readily available. However, their computer system is neither on-line nor connected to a printer. No copies of records were obtained, rather recorded values are noted below.

# **Compliance Evaluation:**

# FGFACILTIY:

The facility has 12 month rolling HAP emission limits of 8.9 tons per year (tpy) for individual HAPS and 22.4 tpy aggregate. At documented throughput levels (11,423 tons material used for the 12-month period ending June 2016; and compared to the 11,629 tons reported to MAERS for El2015), and utilizing the permitted emission factors for each HAP, formaldehyde is the highest emitted HAP (114 pounds) and Total HAPs are << 1 ton.

# EUHMAPLANT:

Ms. Eyer provided a copy of the most recent (2006) stack test (for PM), and SLachance confirmed that the facility had met the required emission limit of 0.04 gr/dry standard cubic foot. Continued compliance is based on documented, acceptable maintenance of the baghouse in accordance with the permit, monitoring establishing that the baghouse is functioning properly, and any possible visible emissions readings. No other site testing has been required.

Ms. Eyer and Tom confirmed that only natural gas is utilized on-site.

Tom stated that the plant does not use any RAP (recycled asphalt pavement), RAS (recycled asphalt shingles), or asbestos; no such materials were noted on-site. The loading bunkers were loaded only with virgin aggregate materials.

The emission records for the plant appeared to be complete and properly recorded. Permitted emission factors are utilized for each pollutant. Records were available in required daily, monthly, and 12-month rolling time

# period formats.

Per above, the plant is well below the production limit of 100,000 tons of HMA (12-month rolling time period) at 11,423 tons; records indicate compliance with the maximum hourly production limit of 150 tons, at about 120 tons per hour (maximum this season).

A record of the temperature of the paving material was also properly documented, averaging 350 °F.

In response to last years' VN, the facility had black-lighted the baghouse and had replaced two bags. Tom reported that 8 to 10 additional bags were maintained on-site. The black lighting event and subsequent maintenance actions (mechanical repairs, patching some holes and leaks) were minimally documented in the "Maintenance Log". Since this took place at the end of the 2015 season, SL can accept this as the required action for the start of 2016.

However, proper, start-of-season CO monitoring had not been completed per Special Condition (SC) 1.16. A Violation Notice (VN) will be sent for this. Note, this is a repeat violation from the previous inspection.

The previous VN Had also addressed baghouse differential pressure monitoring/recording deficiencies. Tom demonstrated the pitot installations (baghouse clean side and dirty side), the manometer in the Control Room, and daily "delta Pressure" readings. These were consistently recorded as 1" water pressure, within the prescribed range. Since the plant was not in operation at this time, SLachance requested that the baghouse fan be started. Once stable air flow was established, SLachance noted "no visible emissions" from the stack, and the differential pressure was observed to be 0.9 +/- (very close to 1 inch.) The facility appears to have properly addressed the differential pressure monitoring/recording deficiencies noted last year.

Tom indicated that there was an alarm system for the baghouse (BH) with an auto shut off if the temperature exceeded 390°F. Other maintenance records for the BH were available to AQD staff.

# EUYARD:

The plant is located adjacent to a gravel pit. The plant maintains records of fugitive dust conditions, controls and documentation of watering to control the fugitive dust. Including recorded rain events, control measures are implemented at the twice-monthly required frequency. Brine had been applied in late June. Mileage records for on-site traffic are maintained, and fugitive dust estimates are included in yearly MAERS reports.

# Appendix A: Fugitive Dust Control Plan

Each of the required elements (Site Maintenance, Roadways, Haul Vehicles, and Recordkeeping) was documented to a reasonable degree; no on-site issues were noted (recognizing low activity levels at this time.) These were further discussed with Ms. Eyer. Elements confirmed included dust treatments at least twice monthly; slow on-site speeds and signage; covered trucks; records; and inclusion of fugitive estimates in MAERS.

# Appendix B: Maintenance for the Baghouse

Again, each element of the Plan has now been addressed, including Item 1, Operating Pressure Drop requirements and records. Records of maintenance activities were available, but are minimalistic. They were found to be consistent with Shook Asphalt staff accounts of actions taken during the 2015 and 2016 seasons.

# Other Considerations:

Due to the seasonality of the process, lack of computerized access, and no mail service to this site (mailings go to Mr. Shook's home), the facility is perennially late with MAERS submittals. Resolution of this has required additional AQD effort and delays finalization of reports on a yearly basis. SLachance proposed that Ms. Eyer provide throughput values to AQD at the end of the production season via fax or mail. AQD could then enter the data, calculate emissions and have the database ready for their approval upon return to Michigan in the Spring. Ms. Eyer didn't think she'd be able to provide a current and complete Natural Gas throughput value (no billing will have taken place by the time they close for the season), but SLachance proposed simple proration of this value from the previous cycle, based on reported throughput. Ms. Eyer seemed amenable to this. SLachance will provide the pertinent MAERS forms, based on the most recent MAERS cycle, highlighted for the values that need updating.

# **Compliance Determination:**

Based on the above, Shook Asphalt is not in compliance with PTI 37-05A, Special Condition No. 1.16. A Violation Notice (VN) will be issued for the following non-compliance item:

Special Condition 1.16 - CO monitor was not used upon start-up of the paving season. Jahan \_\_\_\_\_ DATE 8/8/16 NAME \_\_\_ SUPERVISOR