

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection**

B425326528

FACILITY: LAKELAND ASPHALT CORP		SRN / ID: B4253
LOCATION: 474 AVE A, SPRINGFIELD		DISTRICT: Kalamazoo
CITY: SPRINGFIELD		COUNTY: CALHOUN
CONTACT: John Carr		ACTIVITY DATE: 08/06/2014
STAFF: Rex Lane	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Self Initiated Inspection		
RESOLVED COMPLAINTS:		

On August 6, 2014, Air Quality Division (AQD) staff (Rex Lane) arrived at Lakeland Asphalt Corp. (LAC) located at 474 Avenue A, Springfield, Michigan at approximately 8:20 am to conduct an unannounced air quality inspection. Meteorology conditions at this time were limited visibility (< ½ mile) due to fog/mist conditions and winds were calm to east at 3 mph. Driving east down Avenue A towards LAC with the car windows down prior to arrival at the plant, staff could hear the plant in operation and staff detected a faint to slight asphalt odor. The production facility and yard sits approximately 30 feet lower in elevation than Avenue A and the LAC business office. The southern border that fronts on Avenue A has a tall, solid metal fence barrier, a vegetative barrier, or both. There are residential properties along the south side of Avenue A and to the east of the facility. The property to the north of the facility is zoned industrial and is a brownfield remediation site.

Staff made initial contact with Mr. Thomas Carr, LAC Vice-President, and provided him with a business card and stated the purpose of their visit. Mr. Carr asked if staff could come back later in the day or tomorrow because he had a job estimate that was due mid-morning. Staff asked if someone else could be made available and Mr. Carr indicated that their remaining staff was busy operating the plant. Staff asked if the plant would be operating this afternoon and Mr. Carr indicated that it would be in operation until around 3 p.m. Staff indicated that they had another inspection to do in the Fort Custer industrial park and that they would be back in the afternoon.

Staff arrived back at the LAC office at 1:15 pm and again made contact with Mr. Thomas Carr. Staff provided him with a copy of MDEQ's Environmental Inspections brochure and staff credentials. Staff requested a tour of the plant yard and the control tower for the asphalt batch plant and provided Mr. Carr with a list of production and fugitive dust control records that are required to be maintained under their air permit No. 50-77B. Mr. Carr gave the list to Ms. Laura Carr so that she could start working on the records request.

A front end loader was using their bucket to water the roadway as we walked down to the plant yard. Mr. Carr showed staff an older fire truck that was fitted with a spray bar above the front bumper that they also use to water plant roadways and at other job sites, as needed. Mr. Carr also showed staff their street sweeper (Rosco Model RB-48) that is equipped with a water tank and rotating brushes. We went up to the control tower and staff was introduced to the plant operator, Mr. Steve Carr. The 4,000 pound capacity asphalt batch plant was in operation and producing a surface mix (36A) at a rate of about 110 tons/hour. The surface mix did not contain any recycled asphalt pavement (RAP) and contained about 4.7% asphalt cement (AC). The baghouse differential pressure reading was 0.24" of water and the damper position was 5.6. While in the control tower and walking around the plant yard, staff observed intermittent dust emissions from the hot screens, hot bins and pug mill. Due to the sun angle, Method 9 readings were not possible; however, staff estimates that these periodic emissions averaged 20 – 25 % opacity. The baghouse stack was also observed for a short period of time and staff estimated that visible emissions averaged 0 – 5%.

Equipment installed since the last air quality inspection in 2010 includes a 3rd 200-ton capacity asphalt storage silo, a new Astec pulse jet baghouse and a five bin aggregate storage bin. On 8/20/14, Ms. Laura Carr provided photographic documentation that the new storage silo installed in May 2014 has been equipped with ductwork that routes emissions back to the dryer drum burner and is therefore exempt from permitting under Rule 289 (c). The replacement baghouse is exempt from permitting under Rule 285(d). The cold feed aggregate bins are exempt from permitting under Rule 289(a).

The facility has two parts washers in their maintenance shed. The covers were in a closed position and one of the unit covers had a worn MDEQ cold cleaner sticker. Staff provided Mr. Carr with new cold cleaner stickers. These parts washers are exempt from permitting under Rule 281(h).

In the southeast corner of the plant yard, the facility had approximately 40 tons of cutback asphalt in storage in a three-sided structure. The use of cutback asphalt is regulated under Rule 618 during the ozone season of May 1 to September 30. Cutback asphalt or emulsified paving asphalt cannot contain greater than three percent volatile organic compounds (VOC) by volume or 6.0 milliliters of oil distillate at 500 degrees Fahrenheit as determined by a test method listed under Rule 618(2). Note: Test results for the Seneca Petroleum SMP product was provided on 8/8/14 indicates a VOC content of 0.3% which complies with the limit under Rule 618.

We returned to the business office and Ms. Laura Carr provided staff with dust control measure records and monthly production records on quantity of RAP used in tons. Production records are kept in the control tower so staff indicated that they would email Ms. Carr a list of production records being requested.

Based on observations made during the inspection, records obtained during the inspection and additional facility records provided by Ms. Carr on 8/8/14, information on compliance with Permit to Install (PTI) No. 50-77B special conditions (SC) and Attachment A is listed below:

SC # 13 – Condition limits oil sulfur content to 1.0% at a heat value of 18,000 Btu/lb. Facility has not used recycled used oil or fuel oil in the dryer drum burner since 2010 due to the lower price for natural gas. The associated vertical fuel oil storage tank is empty.

SC # 14 – Particulate emissions from the asphalt plant shall not exceed 0.15 pound/1000 pounds of exhaust gases. Particulate testing has not been required to date.

SC # 15 – Visible emissions from the plant shall not exceed a 6-minute average of 20% opacity, except as specified in Rule 301(1)(a). Due to the sun angle, Method 9 readings could not be performed by staff during the inspection. However, based on the observed intermittent nature of dust emissions from various locations on the batch plant and staff's estimated opacity values, it appeared that the facility was in compliance with this permit condition.

Staff recommended to Mr. Thomas Carr that the facility perform additional maintenance activities to further reduce dust leakage from the plant. [Note: See general correspondence file for May 2014 district office review of facility's proposed installation of a rotary drum mixer that would replace the hot screens, hot bins and pug mill on the existing batch plant. If installation proceeds as expected prior to the 2015 operating season, dust emissions from the plant should be reduced substantially.]

SC # 16 – Particulate testing has not been required to date.

SC # 17 – A new Astec pulse jet baghouse was installed about three years ago. Estimated stack opacity at the time of the inspection was 0 – 5%. Control equipment appeared to be functioning properly during the inspection.

SC # 18 – Baghouse is equipped with a pressure drop gauge. The gauge readout is located in the production control tower and appeared to be functioning properly.

SC# 19 – Condition requires that the exhaust gases be discharged unobstructed vertically upwards from a stack with a maximum dimension of 33 inches by 35 inches at an exit point not less than 36 feet above ground level. It appears that the original rectangular exhaust stack was replaced with a round stack when the baghouse control device was replaced. The surface area of the permitted stack was 1155 square inches which is equivalent to a stack diameter of about 38 inches. It appears that the new stack is < 38 inches in diameter.

SC # 20 – Condition limits operation of the asphalt plant to not more than 13 hours per day. A review of the hours of operation log for May and June 2014 indicates compliance with this condition.

SC # 21 – Condition prohibited operation of the old existing batch plant at the same time as the new plant. The old plant was dismantled years ago.

SC # 22 – Facility developed and submitted a Fugitive Dust Plan to this office in March 1998. Facility maintains a log of dust control measures taken on paved and unpaved roadways.

SC # 23/ Attachment A:

2 – Condition limits production rate while firing natural gas to 1,000,000 tons of Hot Mix Asphalt (HMA) per year. Per facility's most recent MAERS report, annual HMA throughput in 2013 was less than 11% of the permit limit. The production rate reported to MAERS for 2007 through 2012 were all lower than the level reported for

2013.

3 – The facility is complying with the criteria and HAP emission limits based on their annual production throughput and pollutant emission factors listed in the permit.

4 – Fabric filter is installed and appeared to be functioning properly during the inspection.

5 – The facility is required to maintain the air pollution control equipment and maintain a log of significant maintenance activity. According to the facility log, the baghouse undergoes a black light test on a monthly basis which resulted in the replacement of nine bags since the start of the 2014 season.

6 – Baghouse is equipped with a pressure differential gauge and it was operational during the inspection.

7 – The pressure differential gauge appeared to be functioning properly during the inspection.

8 – This condition is not applicable since it applies only to wet scrubber particulate controls.

9 – The facility maintains a log of baghouse pressure drop readings for each operating day.

10 – This condition applies to use of RUO and is not applicable at this time.

11 - This condition applies to use of RUO and is not applicable at this time.

12 – The facility is required to maintain the batch asphalt plant and maintain a log of significant maintenance activities. Facility is maintaining the required maintenance log for the batch plant.

13 - The facility is maintaining a HMA production log on a monthly basis.

14 – This condition applies to multiple fuel type use and is not applicable at this time.

15 – Limits HMA to 30% RAP content on a monthly basis. A review of 2014 production records indicates that the RAP content does not exceed 20% on a monthly basis.

16 - This condition applies when using RUO or fuel oil and is not applicable at this time.

17 – The facility is maintaining a production log for virgin HMA and RAP used on a daily basis.

18(i) – The facility maintains a production log of RAP used on a daily and monthly basis.

18(ii – iv) – These conditions apply when using RUO or fuel oil and are not applicable at this time.

19 – The facility is meeting this condition by submitting an annual MAERS report.

20 – The facility is meeting this condition by submitting an annual MAERS report.

21 – The facility is meeting this condition by submitting an annual MAERS report.

At the time of the inspection and based on a review of required records and additional information that was submitted by the facility following the inspection, it appears that the facility is in compliance with the requirements of PTI No. 50-77B, the permit to install exemption rules identified in the activity report and for storage and use of cutback asphalt under Rule 618 during the ozone season. -RIL

NAME RIL

DATE 8/21/14

SUPERVISOR MD 8/22/2014