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

B582330566

FACILITY: AJAX MATERIALS CORP		**SRN / ID:** B5823
LOCATION: 7392 KENSINGTON RD, BRIGHTON		**DISTRICT:** Lansing
CITY: BRIGHTON		**COUNTY:** LIVINGSTON
CONTACT: Mike Herzfeld , Plant Operator		**ACTIVITY DATE:** 08/12/2015
STAFF: Daniel McGeen	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Partial Compliance Evaluation (PCE) activities, conducted as part of a Full Compliance Evaluation (FCE): 1.) scheduled inspection of Plant 6; and 2.) review of records and operational logs.		
RESOLVED COMPLAINTS:		

On 8/12/2015, the DEQ, AQD conducted an unannounced, scheduled inspection of the Ajax Materials Plant 6, in Brighton, and reviewed the facility's recordkeeping and operational logs. These were Partial Complaince Evaluation (PCE) activities, conducted as part of a Full Compliance Evaluation (FEC).

Facility environmental contacts:

Mike Herzfeld, Plant Operator: 248-244-3448; mherzfeld@ajaxpaving.com

Kathleen Anderson: Environmental Consultant, Axis Environmental Consulting Corp.; 810-845-3925; kanderson@ajaxpaving.com

Facility description:

This facility is a Hot Mix Asphalt (HMA) plant. It consists of a cold aggregate handling system for both virgin aggregate and Recycled Asphalt Pavement (RAP), a parallel flow drum dryer, a baghouse, and product storage silos with a truck loadout area beneath them. The drum dryer is an older style of dryer, compared with newer counterflow designs. The truck loadout area and the silos are uncontrolled. The facility has a paved yard area, and paved roadways around the HMA plant. There are also aggregate storage piles onsite, and unpaved yard areas.

Emission units:

Emission Unit ID	Emission unit description	Permit or exemption	Operating status
EUHMAPLANT	HMA facility including aggregate conveyors, 400 ton per hour parallel flow drum mixer, and baghouse, with 70,000 ACFM	PTI No. 38-90C	Compliance
EUYARD	Fugitive dust sources including plant roadways, plant yard, material storage piles, and material handling operations (including cold feed aggregate bins).	PTI No. 38-90C	Compliance
EUACTANKS	Liquid asphalt cement (AC) tanks with vapor condensation and recovery system.	PTI No. 38-90C	Compliance
EUSILOS	6 HMA paving material product storage silos.	PTI No. 38-90C	Compliance
Flyash silo	Silo for storing flyash, as an ingredient of the paving mixture.	PTI No. 38-90C	Not in use
FGFACILITY	All process equipment at the stationary source, including equipment covered by other permits (if any), grandfathered equipment, and exempt equipment.	PTI No. 38-90C	Compliance

Regulatory overview:

This facility has a synthetic minor permit, Permit to Install (PTI) No. 38-90C, which limits the facilitiy's potential to emit (PTE) for five of the criteria pollutants: carbon monoxide, nitrogen oxides, sulfur dioxides, volatile organic compounds, and particulate matter, to keep it from becoming a major source. The remaining criteria pollutant, lead, is limited by the PTI from an air toxics standpoint, because it does not have the PTE to reach major source levels. The facility is not considered to be a major source for Hazardous Air Pollutants (HAPs), because it does not have the PTE to emit 10 TPY or more of a single HAP, nor the PTE to emit 25 TPY or more of all HAPs combined.

The plant is subject to 40 CFR Part 60, Subpart I, the New Source Performance Standards (NSPS) for

HMA plants. The plant successfully passed its NSPS particulate and opacity testing, on 9/11/1990.

Fee status:

This facility is not classified as a Category I fee source, because it is not a major source, for either criteria pollutants or HAPs. Because it is subject to an NSPS (Subpart I), the facility is classified as a Category II fee source. It is not subject to one of the National Emissions Standards for Hazardous Air Pollutants, and so is not classified as a Category III fee source. Each year, the company reports annual production and emissions through the Michigan Air Emission Reporting System (MAERS).

Arrival:

Weather conditions were sunny , clear, and 60 degrees F, with winds out of the northwest at 5 miles per hour. The plant was running, with a detached steam plume visible from the baghouse exhaust stack. I could not see any sign of particulate emissions or blue smoke, either before or after the steam plume. The unpaved roadways at the site looked to be partially damp, though I could not tell if this was from rain the previous day, or from watering.

Recent history:

In 2014, AQD received a complaint alleging that asphalt odors were detected in a residential area, south of the plant, during the previous operating year, but I could not detect asphaltic odors in the residential area, during my follow up. AQD has not received any odor complaints, so far this year.

PCE activity number 1; inspection:

I met with Mr. Mike Herzfeld, plant operator. The months of June and July have been unusually wet, this year. I collected operating data as follows, at 8:28 AM:

Asphalt mix type: 337-36A Tier 1 RAP

Liquid AC grade: PG 52-28

Total AC content of virgin AC and RAP: 6.76% 6.76%

Virgin AC: 10.8 TPH; virgin AC temperature: 315 degrees F

Production rate: 278 tons per hour (TPH)

Mix temperature: 314 degrees F

Virgin aggregate: 196 TPH; moisture content: 4%

RAP content: 62 TPH; % of total mix: 26% (limit is 35% of total mix); RAP moisture content: 4.0%

3/8 x4 syl aggregate: 54 TPH; % of total mix: 19.4%; 1.9% moisture content

2 NS aggregate: 88 TPH; % of total mix: 31.7%; moisture content: 5.4%

MFS Woodstock aggregate: 53 TPH; % of total mix: 19.1%; moisture content 3.0%

Fuel for drum dryer: natural gas

Baghouse pressure drop: 3.2-3.3" water column (w.c.); stack temperature: 339 degrees F

Draft on dryer: 0.18-0.22" w.c.

At the time of the inspection, they were producing a mix with a 26% RAP content. The RAP limit in PTI No. 38-90C is 35%, averaged on a monthly basis.

In the parallel mix drum, virgin aggregate enters the front of the drum, near the burner. The RAP enters the drum in the drum's midsection. It is my understanding that this is to avoid scorching the RAP, which could cause emissions of blue smoke.

I checked for signs of fugitive emissions. I saw no fugitive emissions from the drum dryer, burner end of the dryer, virgin aggregate feed or RAP feed, ductwork, or baghouse. I could not see steam or blue smoke from atop the product storage silos and hot elevator. I could see small amounts of steam or blue smoke from the truck loadout. There were no fugitive dust emissions from the facility's paved roadways, which looked to have been swept fairly recently.

The plant roadways looked to have been recently swept, and Mr. Herzfeld indicated this was done yesterday, 8/11. I could not see any traffic from trucks driving on pave roadways, nor from front end loader traffic on unpaved yard areas. The site has a posted speed limit of 5 miles per hour.

PCE activity number 2; records and operational logs:

Mr. Herzfeld printed a copy for me of their Daily Road Maintenance log (attached for reference), from 4/21/2015 through yesterday. This details their various fugitive dust control activities at the site, including yesterday's sweeping and watering of roadways and the yard. The unpaved roadways and the plant yard only needed to be chlorided twice so far this year, because of the unusually wet weather. They watered the roadways and plant yard roughly every few days this season, however.

Mr. Herzfeld also provided a copy of a monthly Production Report, for the month of July, 2015.

According to the annual MAERS report for this facility, their 2014 production of paving material was 241,690 tons. This is below the 895,00 tons throughput allowed by PTI No. 38-90C.

At the start of each paving season, the facility is required to conduct CO readings by PTI No. 38-90C, Special Condition 1.9. The purpose of the requirement is to maintain the efficiency of the burner for the drum dryer. The readings were recorded by Ms. Kathleen Anderson, and are listed in the table, below.

CO Reading number	Time on 5/2/2015	CO reading in parts per million (ppm)
1	10:47 AM	175
2	10:49 AM	172
3	10:56 AM	174
4	11:02 AM	241
5	11:06AM	219
6	11:10 AM	216
7	11:13 AM	172
8	11:17 AM	170
9	11:20 AM	177

Mr. Herzfeld showed me their start of season baghouse maintenance checklist, which he completed on 4/6/2015. They did an annual black light test of the baghouse, which tested okay, and they replaced all 495 bags in the baghouse with new ones.

Odor evaluation:

After leaving the facility, I checked for odors offsite. On Kensington Drive, just south of the intersection with Ajax Drive (the facility entrance road), I detected a distinct and definite odor which was difficult to

describe, but I believed it to be coming from Phoenix Industries, nearby. I did not detect asphaltic odors offsite until I was about 1,000 feet to the south southeast of the facility, on Silver Lake Road, at 9:29 AM. I detected a distinct and definite asphalt odor, in an industrial or commercial area. In a residential area, further to the south, I could not detect any odors. I did not determine the asphalt odor to be causing unreasonable interference with the comfortable enjoyment of life and property. I left the area, at this time.

Conclusion:

I could not find any instances of noncompliance with PTI No. 38-90C, the Michigan Air Pollution Control Rules, or 40 CFR Part 60, Subpart I. The plant appeared to be well maintained, and Mr. Herzfeld appeared very familiar with the requirements of the PTI. I left the site at this time.

NAME _____ DATE 8/21/2015 SUPERVISOR _____