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

B162035196

FACILITY: CENTRAL ASPHALT INC.		**SRN / ID:** B1620
LOCATION: 2290 MAY ST, MOUNT PLEASNT		**DISTRICT:** Saginaw Bay
CITY: MOUNT PLEASNT		**COUNTY:** ISABELLA
CONTACT:		**ACTIVITY DATE:** 06/23/2016
STAFF: Sharon LeBlanc	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Scheduled site inspection for HMA plant-sgl		
RESOLVED COMPLAINTS:		

On Thursday, June 23, 2016, AQD District Staff conducted a site inspection at Mt. Pleasant Central Asphalt (Central) (SRN B1620) 2290 May Street, Mt. Pleasant, Isabella County Michigan. One Permit to Install (PTI 74-86B) is associated with the referenced facility and was approved on December 17, 2014.

Site inspection activities were conducted with the intent of confirming the operational status of the permitted equipment and that monitoring/reporting activities were being conducted per the referenced permit. Mr. Russ Blake provided a general overview of operation and practices.

FACILITY DESCRIPTION

The Central facility is located on south of M-20 (East Remus Road) off of Bradley Road, Mt. Pleasant, Michigan. The facility is located in what appears to be a small industrial/commercial area immediately to the west of the Chipp-a-Water Park. The office building located on 900 South Bradley Street, also houses Fisher Transportation Co. and Central Concrete Products.

The facility (FGFACILITY) is a permanent drum mix asphalt facility producing Hot Mix Asphalt (HMA) product. Emission Units (EUs) identified in the permit include:

- **EUHMAPLANT –**
  - **Aggregate conveyors,**
  - **Drum mixer and**
  - **Fabric filter dust collector**
- **EUSILOS –**
  - **Ten HMA product storage silos**

During the site visit, the plant was producing at approximately 400 tons per hour of hot mix. The drum is reported to be a model SSR 405 BMG, parallel flow drum with a rated capacity of approximately 600 tons per hour. Asphalt vapors generated during the process and loading are collected and reintroduced into the burner. Particulate Matter (PM) generated during process is collected thru both a primary collector (knock out pot) and a secondary collector (bag house) with associated stack. Collected PM is reclaimed and returned to HMA mix.

The facility reports having purchased equipment for warm mix asphalt, however, they have not installed it, and there are no plans to install in the near future.

The facility normally runs 8-10 hour days, 5 days a week and approximately 180 days a year. Though actual operations throughout the season will vary according to the job/work schedule any given day/week. Previous discussions indicated that the facility had been in operation since about 1972.

The facility is operated using natural gas fuel. At the time of permitting, fuel oils, and residual oils were

approved for the plant. The most recent permit modification occurred in response to the sun setting of the 208A program the site was participating in. The modification included fuel use limits to ensure they are below major source thresholds. This is consistent with usage reported in the most recent MAERS reporting.

COMPLIANCE HISTORY

A review of district Files indicated that with that recent complaints associated with the facility consist of an isolated complaint (11/4/2011) of possible particulate fallout (1-plus mile away) that was not confirmable by sample analysis..

Annual emissions are reported to AQD in a timely manner.

COMPLIANCE EVALUATION

Operational Status – Upon arrival the facility was noted to be operating with trucks being loaded in the truck load out area. Operational parameters are monitored continuously on the control screen. Monthly and annual totals and averages for operational parameters were available for review in the plant control room and office. At the time of the inspection, the liquid asphalt feed rate was 18 tons per hour (tph). RAP feed rate was at 56 tph. The aggregate feed rate was 320 tph. The reported operating rate was 400 tons per hour with a mix temp of 299 °F

Under FGFACILITY, the permitee is limited to production of no more than 895,000 tons of HMA in any 12-month rolling time period (SC II.2). Readily available records indicate that annual production for the facility as well as 12-month rolling totals for the past year were well below the permit limits.

Material Usage Rates – Production at the facility is order driven, raw materials are obtained from various vendors and stored onsite. Material use rates are monitored continuously on the control screen, with monthly totals and averages available electronically for review. [Special Condition (SC) IV.2]

PTI-74-86B limits fuels to Natural Gas (NG) as well as #2, #4 and #5 fuel oils for FGFACILITY II.1). It also includes material limits for fuel oil use under EUHMAPLANT SC II.1, 2 & 3. Since the facility burns NG as fuel, and has not operated using fuel oil for a number of years, these conditions are not presently applicable.

RAP usage is limited to a maximum of 50% (SC II.4). RAP use is reported to vary based on mix in production, and is order specific. At the time of the inspection, the percent RAP was reported to be 14%. An average of approximately 25% has been reported historically for the facility.

Mr. Blake reported as had the previous plant representatives that no asphalt shingles or asbestos containing materials are used by the plant.

Operational/Design Parameters – PTI 74-86B, SC IV.1 requires that the plant (EUHMAPLANT) shall not operate unless the fabric filter is installed and operating properly. A bag house/fabric filter is present at the facility. The bag house is reported to be rated to operate at approximately 120,000 cfm, was operating with a differential pressure of approximately 4 inches of water, and a pulse cycle of approximately eight seconds.

The plant has installed, calibrated and maintained devices to monitor the virgin aggregate and RAP feed rates to the plant (EUHMAPLANT) in compliance with SC IV.2.

EUHMAPLANT may not be operated unless the silos and truck load-out area are enclosed and the captured fumes are transported to the drum drier as combustion air. (EUSILOS, SC III.1) The same condition requires a limit switch that prohibits loading of asphalt unless the door is closed completely, or an equivalent system. In addition trucks shall not exit the enclosure until all visible asphalt fumes have been evacuated from the enclosure.

Two truck load-out areas are present onsite, each located under a row of 5 Dillman HMA storage silos (a total of 10 storage silos). Both loading areas are constructed with permanent walls on the north and southern sides of the area. The eastern door/entry to the load out area is constructed like a garage door, and is opened remotely to allow trucks to enter for loading. After the truck has entered and before loading begins the eastern door automatically closes. There is a load limit switch (computerized) to prevent loading unless the doors were completely closed and there is a bypass in case of emergency. At the time of the inspection Mr. Blake reported that there had been some issues with the doors attempting to reopen upon closing, and that an electrician was working on the correction at that time.

The western side of each load out area is open to allow the cab of the trucks to pull forward, however it has a short length of vinyl-like curtains across the top of the entrance that will allow trucks to quickly pass thru in the case of an emergency, allow a view into the loadout area (safety purposes), and control emissions during loading. A reported 140 horsepower fan is operated continuously during production, with emissions collected from the storage silos/truck load out area returned to the burner. No VEs have historically been reported during load-up activities in previous site inspections (SCI.1). Nor were any noted escaping the loadout during the June 23, 2016, inspection. Therefore the vinyl curtains meet the intent of enclosing the loadout area. It was noted that the vinyl curtains also were showing signs that replacement would be required, and this has been relayed to Central staff.

Emission Point – Emission points at the facility include fugitive dust emissions and emissions from pollution control equipment. Fugitive dust sources include roadways, aggregate feed bins/conveyors, and duct work associated with the HMA process equipment or dust collection equipment.

No fugitive emissions were noted during the site inspection. Central staff reported that fugitive dust with respect to roadways is controlled principally by wetting down paved areas and sweeping paved areas when appropriate. Stockpiled materials are wetted as needed. No fugitive dust plan is required in the present permit.

Fugitive emissions associated with ductwork and/or its associated process or dust control equipment are reported to be controlled by inspections and maintenance activities. The most recent bag replacement being earlier this month when onsite staff noted VEs from the baghouse. Failed bags were replaced in a timely manner.

Applicable emissions noted during the site inspection were limited to what appeared to be steam from the baghouse. The stack for the baghouse is in compliance with the stack/vent restrictions for EUHMAPLANT SC VIII.1. It should be noted that the only asphalt odors identified during the site inspection were in the immediate vicinity of the liquid asphalt storage tanks, and appeared to dissipate quickly as you walked away from the tanks.

Emissions from the bag house stack were present at the time of the site inspection. Mr. Davis reported that the stack diameter was approximately 5 ft by 5 ft, with a height of approximately 40 ft above ground level, which is consistent with stack dimensions reported at the time of permit issuance. The emissions from the stack consisted of an attached, steam plume. Due to the calm weather conditions, the plume travelled straight up, before being caught by higher winds. No tail-off or fall-out was noted. SC I.6 limits Visible Emissions (VEs) from EUHMAPLANT to a not to exceed 5% opacity.

Monitoring and Testing – Emission testing of PAH emissions may be required at the owners expense (SC V.1), however, at this time no request has been made.

A not to exceed Visual Emission (VE) limit of 5% for EUHMAPLANT is required under SC I.6, and no VE are allowed from EUSILOS (SC I.1). No emissions were visible from the truck load-out station. In addition, VE observations were conducted as part of the June 28, 2011, site inspection. The highest VE reported was an isolated reading of 5% during the observations. A copy of the VE observation form can be found in the file.

A review of records indicates that the facility conducted stack testing activities for Particulate Material (PM) on September 16, 1993 as required under SC 29 in PTI 74-86A.. The June 29, 1994, AQD review of test results indicated that the results were acceptable. PM limits at the time of the testing were 0.04

gr/dscf and test results reported PM emissions of 0.005 gr/dscf.

Record Keeping and Reporting – The referenced permit contains several requirements associated with the usage of fuel oil and residual oils for the permitted process. These include SC16, 17, 22, 23 and 24. As the facility does not use fuel or residual oil, only natural gas for the process, the record keeping requirements not applicable at this time.

Under the existing permit, the facility is required to keep complete all required records by the 15th day of the calendar month for the previous month, unless otherwise specified in a permit condition. The facility reports that monthly data is provided at the end of the month, and permit records are updated before the 15th. Records available appeared to be in compliance with the permit condition (EUHMAPLANT SC VI.1)

Intermittent daily records for EUHMAPLANT include the type and amounts (in gallons) of all fuel oils combusted and the sulfur content of those oils is required under SC VI.5. Monthly records for each calendar month (SC VI.4) that EUHMAPLANT is operated are required for:

- Identification, type and amounts (in gallons) of all fuel oils combusted
- Sulfur content (percent by weight of all fuel oils combusted)
- Total amount of asphalt produced (also required under FGFACILITY SC VI.2)
- Amount of RAP used
- Calculated average percent of RAP per ton of HMA produced

As previously indicated no fuel oils have been used by the plant for many years. So no fuel oil records have been generated by the company. Amount of RAP used and the calculated average RAP content per ton (in percent) is maintained by the facility and in compliance with the permit limits.

Monthly and 12-month rolling emissions for
FGFACILITY are calculated on a monthly basis in compliance with SC VI.1. and VI.2. Data reviewed was compliant with permit limits for FG Facility.

Summary – On Thursday, June 23, 2016, AQD District Staff conducted a site inspection at Mt. Pleasant Central Asphalt (Central) (SRN B1620) 2290 May Street, Mt. Pleasant, Isabella County Michigan. One Permit to Install (PTI 74-86B) is associated with the referenced facility and was approved on December 17, 2014.

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The plant was in operation upon arrival. With respect to permit requirements, and information and observations obtained as a result of the June 23, 2016, site visit it appears that the facility is operating in compliance with its permit. sgl

NAME Shannon Blac DATE 6/30/16 SUPERVISOR C. Hare