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

N559730092		
FACILITY: Ace-Saginaw Paving Co Plant 4		SRN / ID: N5597
LOCATION: 2747 Priemer Road, UBLY		DISTRICT: Saginaw Bay
CITY: UBLY		COUNTY: HURON
CONTACT:		ACTIVITY DATE: 07/07/2015
STAFF: Sharon LeBlanc CO	MPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Facility not operating- unable to confirm VEs. sgl		
RESOLVED COMPLAINTS:		

On Tuesday, July 7, 2015, AQD District Staff arrived onsite to conduct a scheduled-site inspection at 2747 Priemer Road, Ubly, Huron County Michigan. One portable hot mix asphalt plant, Ace-Saginaw Paving Company Plant No. 4 (ASPC4) (SRN N5597) is associated with the location.

Two Permits to Install (PTI 156-95 and 156-95E) and one General Permit (156-95N) are associated with the ASPC4 facility, with the initial permit approved on March 23, 1995. The referenced permit(s) are for a portable, parallel flow drum mix asphalt plant (PTI-156-95E) able to use alternative fuels including natural gas, liquid petroleum gas, No.s 1-6 fuel oils and Recycled Used Oil (RUO). Site inspection activities were conducted with the intent of confirming the operational status and compliance with the referenced general permit. The last site inspection was conducted on May 24, 2012.

Mr. Reino Huovinen (Plant Operator) provided a general overview of operation and practices as well as provided operational information requested as part of the site inspection activities. Copies of the field inspection sheet, aerial photos may be found in the file.

FACILITY DESCRIPTION

The ASPC4 facility is located on the north side of Priemer Road, between Jurgess and McAllister Roads, Ubly, Michigan. The facility is located in rural, agricultural area north of Ubly.

The facility is a portable drum mix asphalt facility. Four Emission Units (EU) (EU001, EUYARD, EUACTANKS and EUSILOS) and one Flexible Group (FG) (FGFACILITY) are identified under General Permit 156-95N. The facility has added an RUO settling tank to separate water from the RUO prior to being drawn into the burner.

ASPC4 personnel indicated that the facility has production rate of up to 330 tons per hour. The drum is reported to be a Stansteel Model DM836 parallel flow drum, with a rated capacity of approximately 425 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 materials are reclaimed and used in the asphalt production process. Two storage silos, one "hot" elevator with vapor reclaim system and one loading station are also associated with the facility

The facilities operating schedule varies according to the job/work schedule and equipment conditions any given day/week. The operating season is ultimately based on order backlogs, but has historically been June through Mid-November.

The plant burner is run using RUO which is allowed under SC 1.2. Stack testing was conducted on September 20, 1995, to meet permit Special Conditions 1.14 and 1.15 (SC 1.14 and 1.15) of 156-95N.

The most recent letter of Violation (LOV)/Notice of Violation (NV) for the facility was dated September 26, 2012, and was issued for record keeping violations associated with SC 1.8 of Permit 156-95N. The referenced condition references the RUO Compliance Monitoring Plan, and the facility at the time of the previous inspection was unable to obtain records for verification samples analyzed. The laboratory associated with those samples had went out of business and copies of the results were unable to be obtained. The violation was addressed on October 10, 2012, and the violation considered resolved.

COMPLIANCE EVALUATION

<u>Operational Status</u> – Upon arrival the ASPC4 facility was not operating due to weather. The plant operator reported that the facility had been started up for the paving season on May 8th, 2015.

<u>Material Usage Rates</u> – Production at the facility is order driven. Production to date for the season was reported to be approximately 20,138 tons as of the morning of July 1, 2015. SC 1.6 limits production to no more than 750,000 tons per 12-month rolling time period. 12-month rolling totals for 2013 and 2014 were well below the permit limits.

Virgin aggregate feed rates, RAP feed rates, asphaltic liquid feed rates, HMA temperatures, differential pressures and other operational and material use information/data is monitored continuously at the facility (SC 1.16), and a daily report is generated for submittal. Daily usage reports indicating the various mix codes, material components of the produced mix by the ton, and total tons produced are submitted to the main office. Copies of daily usage reports were available for review, and a copy of the June 1, 2015, report was obtained to represent the daily records kept onsite. Hard copies of all daily use reports for the ASPC4 facility operating season were kept in a file cabinet in the control room by the plant operator.

RAP usage is limited by permit to a maximum monthly average of 50% (SC 1.5). RAP use is reported to vary based on mix in production, and is order specific. The average RAP use reported on the June 1, 2015 daily logs was reported to be 26.46%.

The plant operator reported that no asbestos shingles or other asbestos containing materials were used in their production, which meets requirements of SC 1.4.

Fuel consumption (SC 1.2) is limited to Natural Gas, liquid petroleum gas, No. 1 through 6 fuel oil, or RUO. The facility has reported the use of RUO as fuel since 2010.

<u>Operational Parameters</u> – At the time of the inspection, the ASPC4 facility was not operating. Mix temperatures normally produced at the facility are reported to be between 300-330 degrees F.

General Permit 156-95N requires that the plant shall not operate unless the fabric filter (SC 1.12), emission capture system for the top of each storage silo (SC 4.1) and vapor condensation and recovery system for the above ground tanks (SC 3.1) are installed and operating properly. As previously indicated, the ASPC4 facility PM control consists of both a primary collector and a bag house. SC 1.12 also requires that the pressure difference/drop across the bag house must be between 2 and 10-inches of water.

With respect to the emission capture system for each of the two storage silos (SC 4.1) and the vapor condensation and recovery system for the above ground tanks (SC 3.1) confirmation of the operation of the vapor condensation and recovery system installation was completed through the main office as part of the 2009, site inspection.

<u>Emission Point</u> –VE Observations were unable to be completed due to local weather conditions which resulted in the plant being shut down during the inspection.

Monitoring and Testing -

Verification and quantification of odor emissions (SC 1.13), emission rates for HAPs (SC 1.14) and CO (SC 1.15) *may* be required for EU001 under Permit 156-95N. As previously discussed in the Facility Description, District Files contain a copy of Source Emissions Test results for PM emissions for the facility for testing conducted dated September 20, 2005 through October 14, 2005. Based on a review of the report and subsequent correspondence it appears that the facility emissions exceeded allowable emission limits under the permit, and that a request for adjusted emission limits was made and approved on February 9, 2006. No records of requests for additional testing under the present permit were found.

CO emissions are reported to be monitored with a hand held device (SC 1.17) prior to the start up of each paving season, then every 500 hours or after a malfunction (whichever comes first) (SC 1.10). Records available at the time of the inspection indicated that the CO emissions readings are being conducted in compliance with the permit. CO readings consisted of eight readings collected over a 30

minute period. Documentation of the activities was recorded on the daily logs. Staff reported that the information was used to fine tune the burners (SC 1.10).

AQD District Staff conducted grab sample of RUO as part of the July 7, 2015, inspection. Laboratory analysis confirmed fuel parameters in compliance with material usage limits outlined in S.C. 1.3.

Prevention and Maintenance Plans –

General Permit 156-9N requires implementation of a fugitive emissions control plan prior to operating the plant (SC 1.9, SC 2.1). Components of the referenced plan (Appendix A of the referenced permit) include: site maintenance, management of on-site roadways, onsite management of haul vehicles, management of front-end loader operations, fugitive emissions from dust collection/process equipment and record keeping.

With reference to fugitive dust management activities, ASPC4 staff reported that dust control was principally by application of water to roadways and stockpiles with application of calcium chloride when appropriate. Dust management activities are recorded on daily logs sheets. Speed limits were clearly posted. HMA haul vehicles traveled on asphalt paved roadways. Roadways were clean, and no spillage was noted. All out-going trucks were reported to cover their loads prior to leaving the site, and a sign stating the requirement was visible.

Records are required under Appendix A of the sites general permit, to be kept and made available upon request until the end of the paving season, and maintained in the operations log book. No formal "operations log book" is kept however daily records are kept onsite in the form of daily field logs. These logs include a summary of any applicable activities, and based on the limited period of time the records must be kept (i.e. one paving season), the onsite files meet the intent of the requirement.

The permittee is required by SC 1.20 to conduct all necessary maintenance and make all necessary attempts to keep the drum mixer/burner and fabric filter dust collector components of EU001 maintained and operating properly at all times. A preventative maintenance plan for the fabric filter dust collector is outlined in Appendix B of the General Permit. Activities outlined in the referenced appendix outline requirements for fabric filter dust collector operating pressures, alarm systems, handling and storage of fabric filter dust, piping and seals maintenance, black light inspections, filter bag inventories, bound log book requirements and actions required in the case of visible emissions. ASPC4 staff indicated that there was an alarm system, and control equipment maintenance schedule, with completed activities reported on the daily log sheet for the facility. Daily log sheets also record operating pressure differences for the bag house.

The bag house inspection log for the even reported a black light inspection prior to the May 8, 2015 season startup, with all bag filters in the system reported to be in good condition. ASPC4 staff reported spare bags were kept onsite for unscheduled replacement activities. PM collected as a result of bag house operation is reclaimed and returned to the mix. (GC 12) Records kept outlining maintenance, inspection and/or repair activities as well as observations of visual emissions are kept on work logs, and as part of the Corporate Office electronic procurement system. Daily and work log records appear to meet the general permit intent, and reflect general business practices for companies utilizing electronic business management and tracking practices.

The efficiency of the burner is maintained by fine tuning the burner to control CO emissions (SC 1.10). The required activities were reported to have been conducted at the startup of the paving season, and are reported to be conducted daily. (Refer to monitoring and testing section of report) Other burner and drum maintenance activities are conducted as part of their general maintenance program, and are conducted generally in the off season.

SC 1.8 requires a Compliance Monitoring Plan (CMP) for RUO, which is outlined in Appendix C of the General Permit. The CMP outlines the required activities for use of RUO as fuel. Analytical reports for RUO delivered to the site were available for review (SC 1.8) onsite for the present operational season. The plant operator reported that a report was received for every RUO delivery and was noted to be onsite.

Available records indicated that the facility is conducting quarterly sampling and analysis for every quarter of facility operation. The vendor analyticals for the most recent delivery (June 15, 2015) indicated that the concentrations of SC 1.3 contaminants reported were within the standards permitted as did facility confirmatory analyticals.

During the inspection, the plant operator confirmed that grab samples had been collected for future confirmatory lab analysis (should it be requested by the main office) from every RUO fuel load received for the operational season. Each was labeled with the date of RUO delivery, and was kept on location until the end of the season. In addition, Mr. Houvinen indicated that the facility does a complete onsite halogen hach test for each delivery. Per the facility, the hach test is per Method 9077. Hach test results are normally recorded on the daily log sheets. Staff noted that the June 1, 2015 daily field log did not record the hach test results, but based on other record reviews this appears to be an isolated occurrence.

The general permit for the facility requires the submittal to AQD of an acceptable plan describing how emissions will be minimized during all startups, shutdowns and malfunctions (SC 1.11). The plan is presently on file in the District Office.

Record Keeping and Reporting -

Under General Permit 156-95N requirements for record keeping and reporting included:

- Intermittent daily records of virgin aggregate feed rate, RAP feed rate, asphalt paving material product temperature and information sufficient to identify all components of the asphalt paving mixture. (SC 1.22)
- HMA mix design and time of start-up for each mix shall be recorded and kept on file until the end of the paving season. (SC 1.22)

As previously indicated feed rates and operational parameters are monitored continuously on the control screen (SC 1.16 and SC 1.18), with daily summary logs printed out and submitted to corporate. A review of the onsite records indicates that the information required to meet the above referenced record keeping and recording requirements has been met. A minimum of one year of the referenced records are stored onsite, with copies and additional year's records reported are readily available for review at the main office.

Some or all of the following record keeping and reporting requirements were not available onsite, and were provided upon request by staff at the Main Office for review.

- Records of all significant maintenance activities conducted and significant repairs made to drum mixer/burner and fabric filter dust collector (EU001). In addition records for the fabric filter dust collector are to be consistent with the Preventative Maintenance program outlined in Appendix B of facilities general permit which requires logs in a bound notebook, (SC 1.20)
- Records of all CO emissions and related production data including the dates and times of emissions monitored (SC 1.17). CO emission data will be used to calculate the pounds of CO emitted per ton of HMA produced. (SC 1.24)
- Monthly records of type and amount of all fuel oils combusted, sulfur content by weight, specific gravity, flash point and their higher heating values. (SC 1.21)
- Average daily, monthly and 12-month rolling time period records of the amount of HMA paving material produced from EU001. (SC 1.25)
- Monthly records of tons of HMA produced containing RAP and the average percent of RAP per ton produced for HMA (SC 1.21).
- Monthly and 12-month rolling time period emission calculations of all criteria pollutants and HAPs listed in the Emission Limit Table for EU001 (SC 1.23)

The general permit for the facility requires that calculations for emissions referenced above be made available by the 15th of the calendar month for the previous calendar month. In addition, the general permit requires the facility to maintain copies of all records and calculations on file for a period of at least 5 years.

In addition to the above identified record requirements, the general permit requires the calculation of the annual fugitive dust emissions of particulate matter for EUYARD (SC 2.2) and the actual emissions of HAPs from FGFACILITY (SC 5.2). A review of district files indicated that timely annual MAERS submittals have been made for the facility. The most recent being for the 2014 calendar year.

Summary -

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The facility was not operating upon arrival. Information reported during site inspection activities indicated that general operation and material use was in compliance with the referenced permit. Confirmation of the installation and proper operation/maintenance of a vapor condensation and recovery system has been previously confirmed.

Operational parameters and material usage rates are monitored continuously on the control screen, with summary sheets/logs printed out and submitted daily. The required monthly and yearly information is readily available at the main office.

The permit requires monthly and 12-month rolling average emission calculations were maintained and readily available through the corporate office. In addition, the CO monitoring data (SC1.11 and SC1.16) used to fine tune the burners though onsite appeared to be conducted in compliance with the permit conditions.

The facility records indicated that following their RUO compliance monitoring plan as required under the general permit. Fuel parameters reported by vendor analyticals as well as confirmatory samples collected by the facility and AQD Staff verified the RUO used onsite meets material limits outlined in the permit.

No compliance issues were noted as part of the site inspection or supplemental record reviews, and the facility appears to be operating in General Compliance with their existing permit. sgl

Marcus UBlanc DATE 2/31/15

SUPERVISOR C. Mace