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

B196022042

FACILITY: Cadillac Asphalt LLC		**SRN / ID:** B1960
LOCATION: 51777 W 12 MILE RD, WIXOM		**DISTRICT:** Southeast Michigan
CITY: WIXOM		**COUNTY:** OAKLAND
CONTACT: Alan Sandell , General Manager		**ACTIVITY DATE:** 07/09/2013
STAFF: Robert Elmouchi	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Scheduled inspection		
RESOLVED COMPLAINTS: C-13-01016, C-13-01032		

On July 9, 2013, I conducted an unannounced scheduled inspection of Cadillac Asphalt, L.L.C., located at 51777 W.12 Mile Rd, Wixom, Michigan.. The purpose of this inspection was to determine the facility's compliance with the requirements of the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the administrative rules; the conditions of Air Use Permit to Install (PTI) No. 476-94F; and complaints C-13-01016 and C-13-01032.

I began by conducting odor observations at the complainants address because the most recent complaint had occurred on the previous day and the weather forecast predicted similar conditions the following day. I arrived on site about 8:30 a.m. and did not detect a foul odor. I drove an area downwind of Cadillac Asphalt and did not detect a foul odor. While at the complainant's location, I placed my nose close to the natural gas meter to determine if a small leak may have created the perception of a foul odor but I did not detect the odorant used to make a natural gas leak detectable.

I observed that the garage door of the adjacent neighbor's home located at 51332 E. Bourne Terrace was open and one vehicle was parked inside. I knocked on the front door, presented DEQ photo identification and introduced myself. I asked the adult resident if she had smelled a foul odor in the neighborhood and she said that she had not. I gave her my business card and said she could call me if she smelled a foul odor and wanted to report it. I then proceeded to Cadillac Asphalt to conduct an on-site inspection.

I entered the office building identified myself and presented DEQ photo identification. I met with Mr. Alan Sandell, General Manager. Mr. Sandell was present throughout the inspection except when I climbed to the top of the silos. We discussed the addition of the blue smoke (fugitive emissions emitted from the top of the hot mix asphalt (HMA) storage silos) capture system. Mr. Sandell stated that other Cadillac Asphalt facilities have similar capture systems (control device) but that the position of the filtered exhaust at the other locations is at, or near, ground level whereas the exhaust position at the Wixom facility is mounted at the top of the silos. This exhaust configuration has a problem with premature clogging of the particulate filter system plus the accumulated condensation of exhaust vapors (see image 6). Apparently, the current configuration is causing the exhaust filters to clog after producing only 40,000 tons of HMA. Furthermore, there is a concern that the fan driving this capture system is so powerful that it may actually be drawing fines from the HMA mix drum that would otherwise be collected by the baghouse. Because of the premature clogging, the capture system is undergoing an engineering analysis to determine how to stop the premature clogging and condensation. Mr. Sandell expects the exhaust to be repositioned at, or near ground level. The variable speed exhaust fan has been set at 47% in the interim. The installation of this control device appears to be exempt from R201 per R285(f).

I asked Mr. Sandell if the capture system was designed with the future capability of being able to

capture emissions from loading vehicles. Mr. Sandell stated that the system, as installed, is capable of load-out control but there are no current plans to install a structure under the silos to capture load-out emissions.

PTI No. 476-94F was approved on April 11, 2011, which effectively replaced PTI No. 476-94A. It appears that some intermediate versions of PTI No. 476-94 (B-E), although approved, were not implemented.

Cadillac Asphalt, L.L.C. (Cadillac) manufactures hot mix asphalt (HMA) products for surface paving applications. As part of HMA production equipment, this facility also has a 20,000 gallon recycled used oil (RUO) tank, a 12,000 gallon SS1H – Meeker bonding agent tank (a field construction material used to adhere asphalt to the substrate or as a bonding agent between layers of asphalt) and a 12,000 gallon diesel fuel tank (for fueling off-road equipment).

Mr. Ken Jones, Plant Operator, was operating the control room during this inspection. Mr. Jones provided copies of records during the inspection and Mr. Mike Sekan provided electronic copies of records later that week.

EUHMAPLANT

II. Material Limits
Mr. Jones and Mr. Sandell confirmed that this facility has only used natural gas for fueling HMA production since PTI 476-94F was approved. Records provided appear to support that statement. No RUO has been used as fuel for more than two years. Records indicate that HMA RAP content has not exceeded 50% on a monthly average.

The 12-month rolling total production of HMA was less than the 895,000 tons specified in the PTI. Records appear to indicate that the daily average of 600 tons per hour of HMA production has not been exceed.

The sulfur content of pipeline quality natural gas does not exceed the permit limit of 1.0[%].

III. Process / Operational Restrictions
RUO has not been used as a fuel for more than two years, therefore this condition was not evaluated. Records appear to indicate that fine tuning of the burners to control CO emissions has been performed per the permit required schedule.

IV. Design / Equipment Parameters
The HMA process was not operating while I was on site therefore I was not able to evaluate baghouse pressure drop.

VI. Monitoring / Recordkeeping
Calculations appeared to be completed in a timely manner. Records were made available upon request. I observed production records of the tons of HMA containing RAP and average percent of RAP per ton. The permittee presented intermittent daily records of the virgin aggregate feed rate, RAP feed rate and components of the asphalt paving material mixture.

The records provided appear to indicate compliance with handheld CO monitoring requirements.

The permittee provided average daily, monthly totals and 12-month rolling totals of HMA produced. The recorded values appear to indicate compliance. The permittee provided records of the hours during which HMA is produced.

VII. Stack / Vent Restrictions
It appears that the HMA exhaust stack dimensions are in compliance with the maximum diameter and minimum height.

EUYARD
Per Mr. Sekan's statements and records provided, it appears that Cadillac is in compliance with the special conditions of EUYARD.

NOTE: Special condition III.1 contains a typographical error that refers to Appendix B but should actually be Appendix A. The permit section has been notified of this error.

FGFACILITY
Records provided appear to demonstrate compliance with the individual and aggregate HAPs emission limits.

CONCLUSION
The records I reviewed appeared to meet the recordkeeping and monitoring requirements of PTI 476-94F. This facility appears to be in compliance with the evaluated air pollution control rules.

Image 1(P1240267.JPG) : View of HMA silos from the north with top mounted fugitive emission capture system that was installed on top of the silos between the 2012 and 2013 production seasons.

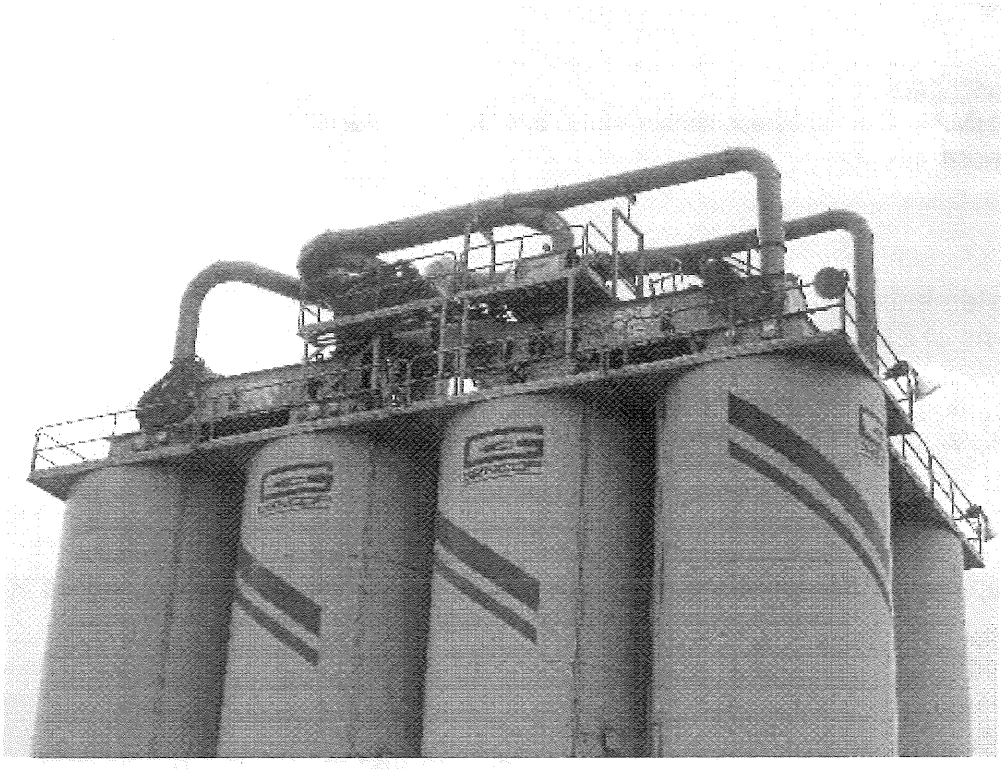

Image 2(P1240268.JPG) : Medium-close view of HMA silos from the north with top mounted fugitive emission capture system that was installed on top of the silos between the 2012 and 2013 production seasons.

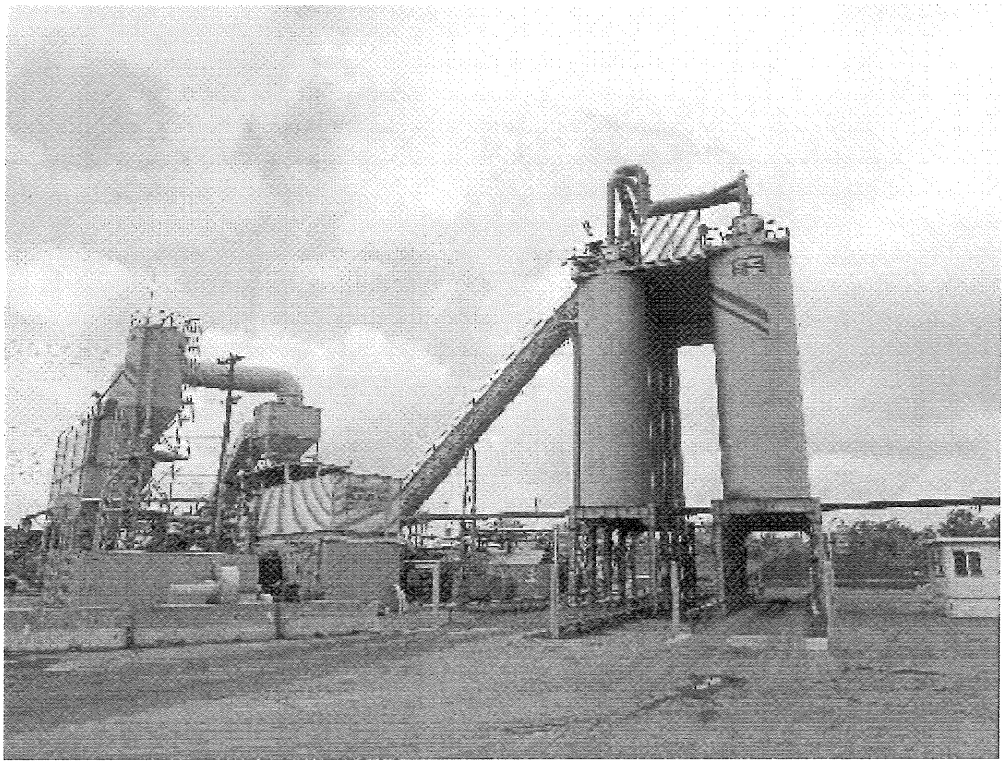

Image 3(P1240269.JPG) : View of (from left to right) Baghouse, Control Room, Transfer Conveyer and HMA silos as viewed from the east.

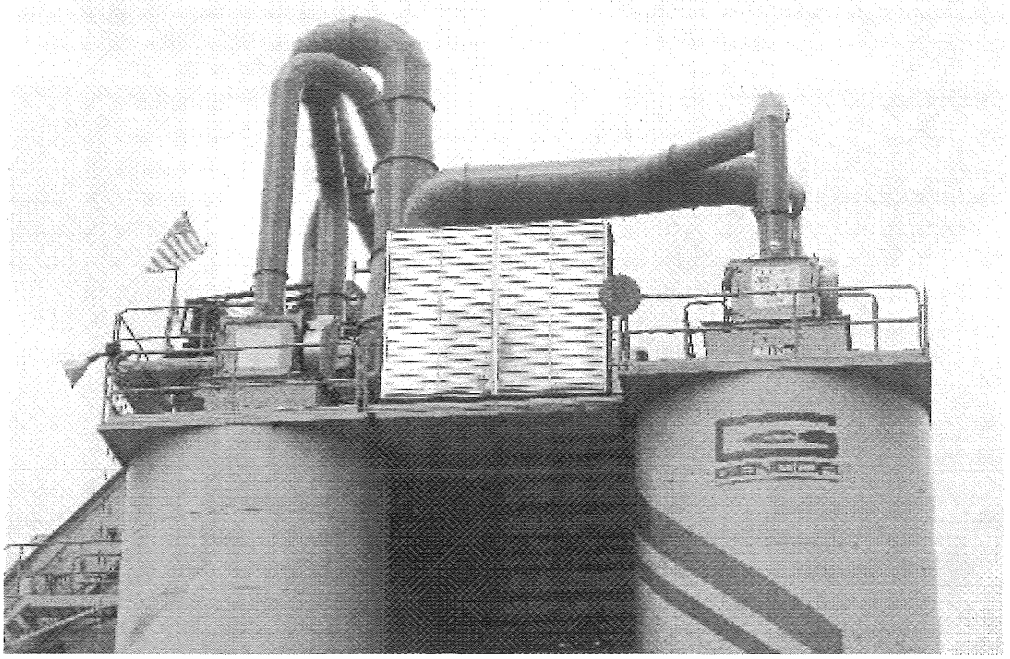

Image 4(P1240272.JPG) : View of top of HMA silos as viewed from the east. Showing fugitive emission collection ductwork and louvered post-particulate filtration vents.

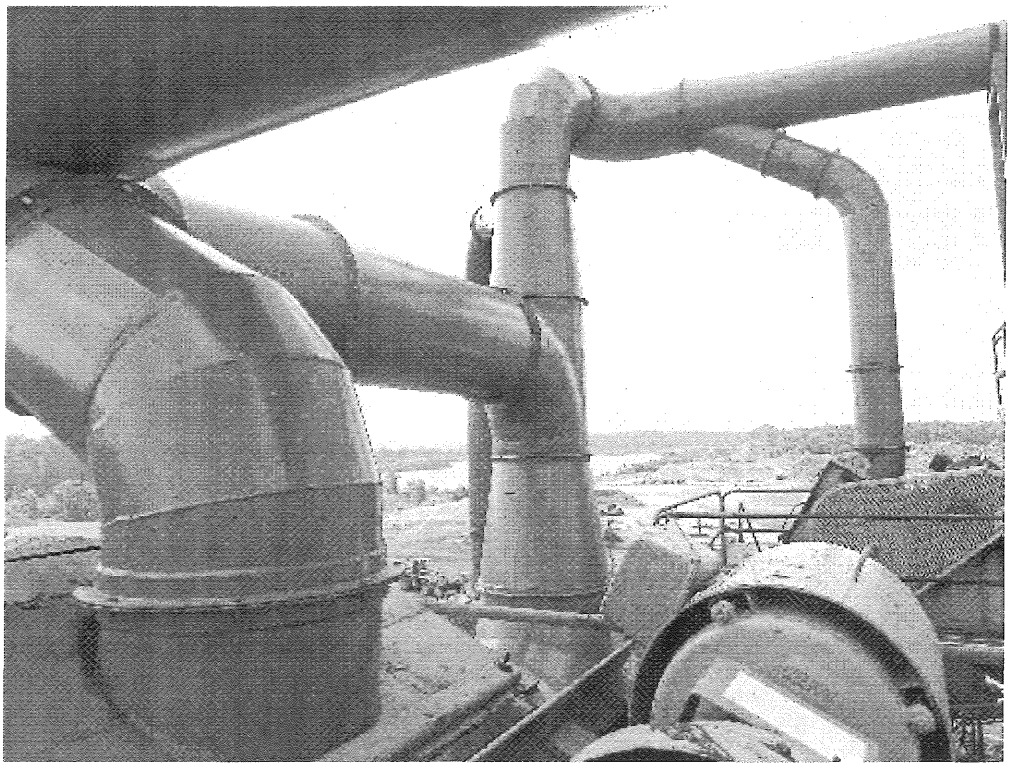

Image 5(P1240283.JPG) : Wide-angle view of fugitive emissions collection system as viewed from the top of the silos.

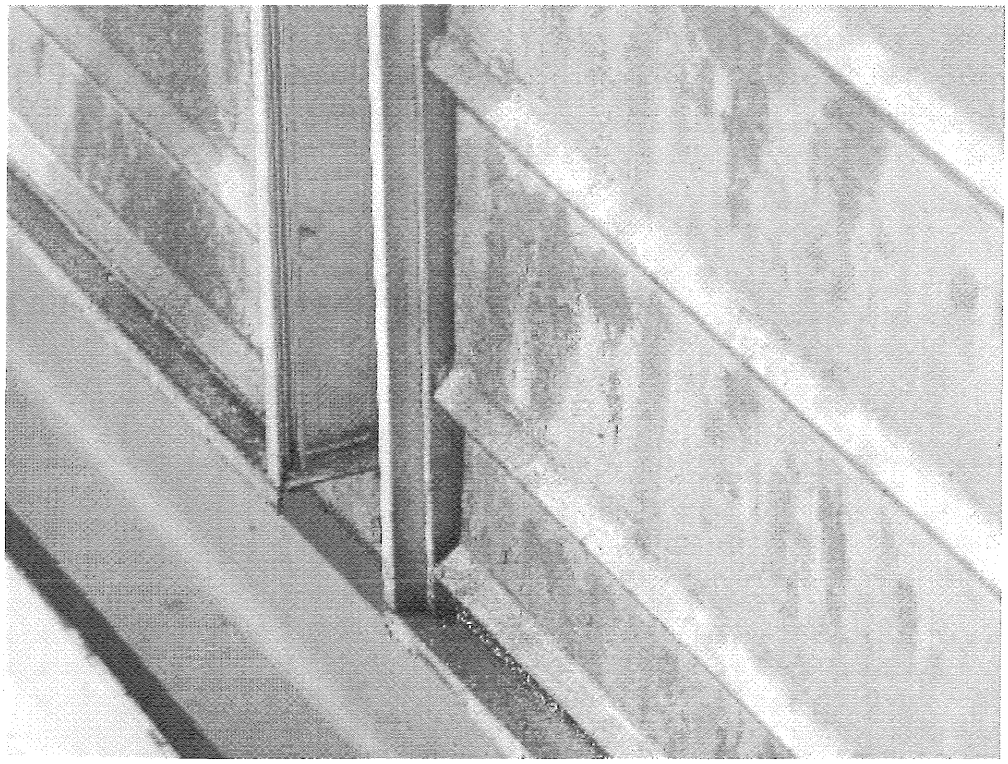

Image 6(P1240292.JPG) : Close-up view of post particulate control condenstaion on the exhaust louvers. Control system is undergoing engineering review to correct this issue.

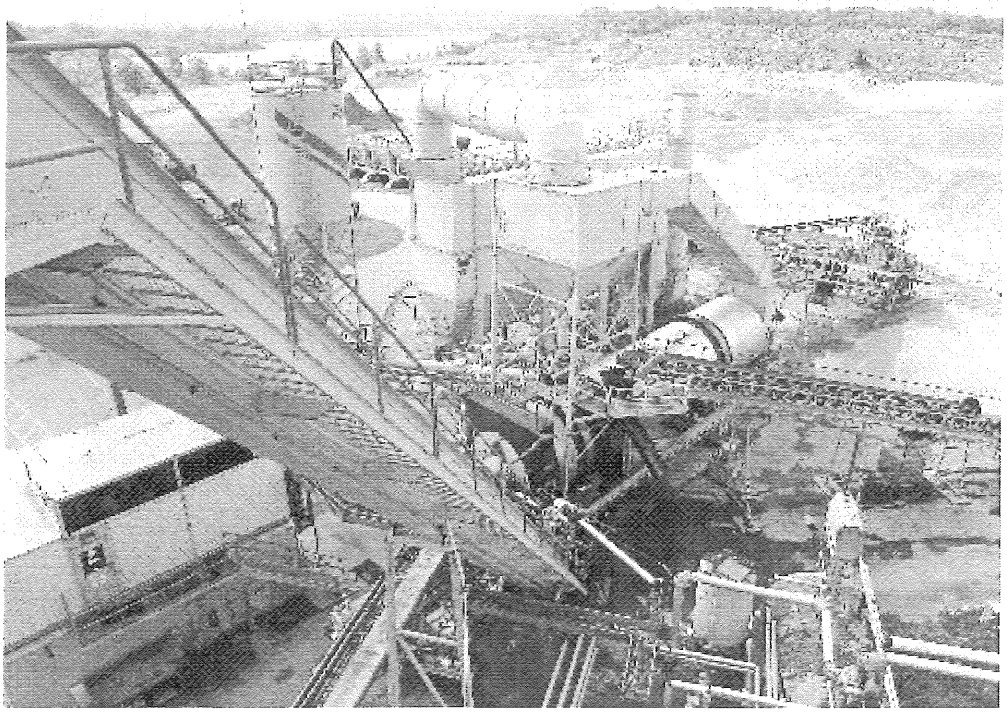

Image 7(P1240295.JPG) : Wide-angle view of Control Room, Transfer Conveyer, Baghouse, and HMA drum as viewed from the top of the HMA storage silos.

NAME Robert Hancock DATE 7/31/13 SUPERVISOR CJE