

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection**

P113863807

FACILITY: Black Gold Transport, Inc.		SRN / ID: P1138
LOCATION: 4237 Commerce Drive, WAYLAND		DISTRICT: Kalamazoo
CITY: WAYLAND		COUNTY: ALLEGAN
CONTACT: Rahn Bentley , Plant Manager		ACTIVITY DATE: 06/23/2022
STAFF: Cody Yazzie	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Onsite Inspection		
RESOLVED COMPLAINTS:		

On June 23, 2022 Air Quality Division (AQD) staff (Cody Yazzie) arrived at 4237 Commerce Drive, Wayland Michigan at 2:30 PM to conduct an unannounced air quality inspection of Black Gold Transport (hereafter Black Gold) SRN (P1138). Staff made initial contact with the office receptionist and stated the purpose of the visit. Rahn Bentley, Black Gold, Plant Manager, is the environmental contact and arrived shortly thereafter and took staff to his office for further discussions.

Black Gold is a new Hot Mix Asphalt facility that started operation at the Wayland location in 2021. This hot mix asphalt facility has roughly seven staff onsite during operation. The facility operates one shift that is typically from 5:00 AM to 5:00 PM. Production hours vary on the amount of asphalt that the facility is producing. Typical operating days are Monday through Friday with occasional Saturdays.

Black Gold is a new facility that obtained its PTI No. 83-20 on September 21, 2020. This allowed the facility to commence construction of the permitted emission units and start operation on Staff asked, and Mr. Bentley stated that the facility does not have any emergency generators, cold cleaners, or boilers.

Mr. Bentley gave staff a tour of the facility. Required personal protective equipment are safety glasses, high visibility vest, hard hat, steel toe boots, and hearing protection. Staff observations and review of records provided during and following the inspection are summarized below:

EUHMAPLANT:

EUHMAPLANT is the emission unit for the equipment that includes the aggregate conveyors, 400 tons per hour counter flow drum, and fabric filter dust collector that are a part of the hot mix asphalt facility.

The facility has hourly PM emission limits that need a stack test to show compliance. The facility was required to show compliance with these PM emission limits within 60 days of achieving the maximum production rate, but no later than 180 days after commencement of trial operation. The Stack test was conducted on August 17, 2021. The stack test showed that over the Three 1-hour test runs the total average Filterable PM was calculated to be 0.0054 gr/dscf and 0.0035 lbs/tons of HMA paving material produced. These are well below the PM limits outlined in Special Conditions I.1-4.

The facility has an hourly and 12-month rolling CO emission limit. The hourly CO emission limit is evaluated under stack testing conditions. Special condition SC.V.2 allows for the Kalamazoo District Office AQD to request a stack test to verify the CO emissions. Request for this stack test

have not been made at the time of the inspection. The 12-month rolling emission limit requires a 12-month rolling emission calculation using the emission limit in the emission limit table apart of PTI No. 83-20A as the emission factor for the calculation. For CO this emission factor is 0.13 lbs of CO emissions/ton of HMA paving material produced. The facility appears to be using accurate production HMA production data and the 0.13 lbs/ton emission factor for the calculation. Staff reviewed data for the period of January 2021 to May 2022 and the largest 12-month rolling emissions recorded was 18.8 TPY May 2022. This is well below the 28.0 TPY that the facility is limited to.

The facility has hourly emission limits for NO_x, SO₂, Lead, and other Toxic Air Contaminants (TACs) that are associated with the HMA production process. These emission limits are outlined in the emission limit table in PTI No. 83-20A. Special condition SC.V.2 allows for the Kalamazoo District Office AQD to request a stack test to verify these various emissions. Request for this stack test have not been made at the time of the inspection. Although there is no 12-month rolling limit the facility is required to calculate the emissions of all the TACs, SO₂, NO_x and Lead that are listed in the emission limit table. In a similar manner to the CO emission calculation if no stack test data is available for these pollutants the facility is required to use the emission limit in the emission table as the emission factor. From review of the records the facility is using appropriate emission factors and production data to complete the calculation. The largest 12-month rolling of NO_x was 4.35 TPY which occurred in May 2022. The largest 12-month rolling of SO₂ was 0.578 TPY which occurred in May 2022. The largest combined total of all the TACs/HAPs was 1.53 TPY which occurred in April 2021. The largest emissions of a singular TACs/HAPs is H₂SO₄.

The emission unit also has a 20% Opacity limit that is based on a 6-minute average. During the inspection there were no opacity observed coming from the stack of the baghouse or the yard. There were some visible emissions observed from the loading/transfer station. The Visible emissions coming from the loading/transfer station are discussed in EUSILO.

The facility does use Recycled Asphalt Pavement (RAP) materials as apart of their asphalt mixture. Special condition II.3 limits the amount of RAP based on a monthly average to 50%. Black Gold is currently keeping daily averages of RAP content. Records were reviewed from January 2021 through June 2022 and the largest daily RAP content of HMA material was 38.35%. This daily percent RAP content is well below the 50% allowed which shows compliance with the monthly limit.

The facility is also limited on the amount of tons of HMA paving materials the facility can produce on a 12-month rolling time period. Records showed that the facility is about half of the permitted limit of 430,000 tons of HMA paving material produced. The largest production 12-month rolling time period occurred in May 2022 in which the facility produced 291,963.66 Tons of HMA paving material.

The facility also has an hourly limit on the amount of HMA paving materials that can be produced. The facility is limited to 400 tons per hour of HMA paving materials produced. This calculation is done by using the daily total production that is recorded by the facility and dividing by the recorded amount of hours that the facility operates. Records reviewed from January 2021 through June 2022 showed that the facility usually produces around 250 tons per hour to 300 tons per hour on a daily average. The highest production rate was recorded on 8/14/2021 that

was 399 tons per hour. This 399-tons per hour appears to only have happened once during the time period reviewed.

The facility does have a fabric filter dust collector system installed. During the inspection Staff did record a differential pressure reading. Staff recorded 3.4 inches of H₂O which is within the normal operating range of between 2-10 inches of H₂O. The facility is required to record the daily pressure drop reading of the baghouse. These pressure drops are taken and recorded daily by hand on the PLANT EGLE PERMIT DAILY SHEET. These are then converted to an electronic copy under the daily production log tab. A review of the daily records showed that the pressure drops were operating within the normal operating ranges of 2 – 10 inches of water. If the baghouse was operating out of range the issue appeared to be fix before the next day of operation or and indication that baghouse condition was checked.

The facility keeps daily usage records that show the amount of materials used in the different mixes that are produced throughout the day. The records show the amount of virgin aggregate, RAP, and AC material used. This information gets used in the daily production log spreadsheet and daily emissions calcs spreadsheet for daily RAP feed rate and daily Virgin Feed rate.

The facility is required to record the instances of high temperature alarms for the fabric filters. The facility has the ability to electronically look at the reasoning for the alarm and will indicate how the alarm was turn off. Number of times the alarms are tripped are recorded on the PLANT ELGE PERMIT DAILY SHEET.

The facility is required to monitor and record with a handheld CO monitor, the CO emissions from EUHMAPLANT and the production data associated with the time the emissions data were collected. Black Gold provided the Burner test that was required at the start up of operation. The Test should that the CO ppm was well below 500 ppm required.

EUYARD:

This source is includes the plant roadways, plant yard, material storage piles, and material handling operations (excluding cold feed aggregate bins).

EUYARD is limited to 5% opacity. During the inspection Staff did not observe any visible emissions. The facility is required to follow and maintain some records from the Fugitive Dust Control Plan located in Appendix A of PTI No. 83-20A. The facility appears to be complying with the requirements in Appendix A. Staff observed the required speed limit signs posted at the entrance and exit. The facility maintains records of if dust control is applied, what type of control is applied, if the facility swept, and if the facility experienced rained. It appears that the facility typically applies water as control if it does not rain.

EUACTANKS:

These are three 30,000-gallon and one 15,000-gallon vertical liquid asphalt cement storage tanks. One 1,000-gallon double walled diesel fuel tank. The 30,000-gallon liquid asphalt tank is heated internally with a 2.0 MMBTU/hr natural gas fired hot oil system.

The only requirements of these units unless EUACTANKS the vapor condensation and recovery systems installed, maintained, and operated in a satisfactory manner. The facility must also

maintain records for maintenance activities of EUACTANKS consistent with the manufacture's recommendations. These units appear to be complying with the requirements in PTI No. 83-20A.

EUSILOS:

The facility has product storage silos that are used to store and transfer product to trucks. This system is equipped with an emission capture system at the top of the silo and load out control at the bottom of the silo where the trucks are loaded.

Staff did observe some visible emissions from the transfer station at the top of the silo. The observed visible emission were roughly 20% opacity when staff observed operations on June 23rd. Staff was not able to take a proper Method 9 reading before the operations shut down for the day. Staff came back on June 28th to observe the silo emissions. When Staff observed visible emissions from the silo on June 28th the emissions were much better. Staff noted that the VE were around 10% opacity which is below the 20% limit in the PTI. Mr. Bentley indicated that there were some seals that the facility tightened up. With the facility fixing the issue in a timely manner it would appear that the facility is complaint in regard to Visible emissions.

At the time of the inspection and based on a review of records obtained during or following the inspection, the facility appears to be in compliance with PTI No. 83-20A. Staff stated to Mr. Bentley that a report of the inspection would be sent to the facility for their records. Staff concluded the inspection at 3:45 PM.-CJY

NAME Cody Yezzer

DATE 8/9/22

SUPERVISOR RIL 8/10/22