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

N774073446

FACILITY: Gerken Materials, Inc - HMA Plant 7		**SRN / ID:** N7740
LOCATION: 1660 E Chicago Rd, JONESVILLE		**DISTRICT:** Jackson
CITY: JONESVILLE		**COUNTY:** HILLSDALE
CONTACT: David Benecke , Environmental Manager		**ACTIVITY DATE:** 09/04/2024
STAFF: Brian Carley	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Scheduled, targeted on-site inspection		
RESOLVED COMPLAINTS:		

Company Contact: David Benecke
Phone: 419-533-7701
Email: David.Benecke@GerkenPaving.com

Purpose

This was a scheduled targeted inspection of GMI – Jonesville HMA Plant 7. The purpose of the inspection was to determine compliance with Permit-to-Install (PTI) #369-06A for a hot mix asphalt plant. This facility is a synthetic minor opt-out source and is subject to 40 CFR Part 60 Subpart I for hot mix asphalt facilities. I arrived at the facility and with Dave, Doug Willeman, HMA Plant Manager, and Kayden Sweet, plant operator.

Background

This facility is a hot mix asphalt (HMA) plant that is rated at 250 tons/hour. This facility employs a drum dryer in its process and the emissions are controlled by a fabric filter dust collector. Also, the facility has a batch tower that can hold up to 10,000 pounds of product. It is permitted to use No. 2 fuel oil, No. 4 fuel oil, blended fuel oil, recycled used oil (RUO), or natural gas. Even though it is permitted to use natural gas as a fuel, there is no natural gas line connected to this facility. They are limited to a maximum of 50% RAP material and can only process up to 100,000 tons of HMA paving materials per 12 month rolling time period as determined at the end of each month. This facility is a small batch plant that mainly works with local contractors and usually operates only a few hours a day (usually 1-3 hours/ day). This facility is subject to 40 CFR Part 60, Subpart I - Standards of Performance for Hot Mix Asphalt Facilities.

Compliance Evaluation

EUHMAPLANT

The plant was operating at the time of the inspection. I was told that they had produced 240 tons of asphalt that day. They use RUO as their main fuel to run their operations with No. 2 fuel oil as their secondary fuel (Special Condition (SC) II.1). Dave provided me for my review with their purchase orders of the RUO and the analyses of the RUO. The analyses showed that they were well under the limits specified under S.C. II.2, which allowed them to use the RUO as fuel. He also stated that they are in compliance with S.C. II.3 as they do not use any asbestos tailings or waste materials containing asbestos. They have a limit of 50% RAP that they can use in their mix (S.C. II.4) and according to the records that Dave provided me, the highest amount of RAP that they are using in their mix is 24% RAP (see attachment 1). They are also not allowed to exceed 100,000 tons per 12-month rolling time period and 250 tons/hr of HMA paving material (S.C. II.5 & II.6). For the months of July and August 2024, they averaged 41,113.89 tons and 39,282 tons for the 12-month rolling time period, respectively (see attachment 2). For the same two months, they averaged 167.52 tons/hr and 150.77 tons/hr, respectively (see attachment 1).

They are required to implement and maintain a fugitive dust plan, preventative maintenance plan, emission abatement plan for startup, shutdown and malfunction, and a compliance monitoring plan for the RUO (S.C. III.1 - 4). Dave said that they were following those plans. They said that the adjacent sand and gravel operation (also owned by Gerken) will water the roadways as necessary. If necessary, they said that they can get a water truck from the main office to come down and water the roadways. The sand and gravel operation is keeping a record of any fugitive dust control that is done at the facility (see attachment 3). Dave showed me the list of all preventative maintenance they did before starting up the plant (SC VI.5). This also included the blacklight test that they conducted on the baghouse. They are following the emission abatement plan for startup, shutdown and malfunctions. They are following the compliance monitoring plan for the RUO. As noted previously, Dave was able to provide me with the most recent analysis of the RUO showing it met all the requirements of specified in SC II.2. They are doing the upkeep on the baghouse that is installed. Dave showed me what maintenance was done on the baghouse and they are keeping the supplies that are required by emission abatement plan. Kayden monitors the pressure drop across the baghouse and he said it usually runs between 5” and 7” H20 (S.C. IV.1) and logs it every day (see attachment 1).

AQD has not required this facility to conduct a verification and quantification of odor emissions at this plant (SC V.1).

Per S.C. IV.2 and VI.2, they are monitoring the virgin aggregate feed rate and the RAP feed rate (see attachment 1). Dave showed me the results of CO monitoring that should have been done this spring with the facility startup (SC VI.3 and VI.9). They haven’t exceeded 500 hours this year or had a malfunction that would require another CO test at the time of the inspection. I was provided the records required fuel combusted (identification, type, amount in gallons, and composition) and tons of HMA containing RAP produced and the average percentage of RAP in HMA containing RAP per the requirements of SC VI.6 (see attachment 1). I then asked for the records for the production information (virgin aggregate and RAP feed rate, asphalt paving product temperature, and information sufficient to identify all the components of the asphalt paving mixture) as required by SC VI.7 (see attachment 1). I then asked for the monthly and 12-month rolling time period emission calculations for all criteria pollutants and toxic air contaminants as required by SC VI.8 (see attachment 4). I then asked for the average daily, monthly, and 12-month rolling time period of the amount of HMA produced as required by SC VI.10 (see attachments 1 and 2). Using a rangefinder, I was able to determine that the stack was approximately 63 feet, which is higher than minimum 60 feet above the ground per SC VIII.1. I determined that they are complying with this table.

EUYARD

As stated in Process and Operational limits section above, they are implementing the fugitive dust plan (SC III.1). They reported their fugitive dust emissions into SLEIS on March 18, 2024, as required by SC VI.2. I determined that they were complying with this table.

EUACTANKS

The vapor condensation and recovery system is installed and is operating on the liquid asphalt cement storage tanks (SC III.1). They are complying with this table.

EUSILOS

The storage silos have an emission capture system located on the top of each silo that are being maintained (SC III.1). They have partially enclosed the silo loadout area and the

batch tower is also partially enclosed by due to equipment installed next to it. I was able to observe a truck being loaded with asphalt from the silo loadout during the inspection. I determined that they are complying with this table.

FGFACILITY

Dave provided me with the calculated actual emissions of HAPs from the facility based on the emission rate limits in the Emission Limit Table (see attachment 4). The largest individual HAP total over the previous 12 months was for formaldehyde in September 2023 at 476.96 pounds (0.24 tons) based on a 12-month rolling time period. This is well below the 9.0 tons/year that is required in SC I.1. They had an aggregate total of HAPs of 0.60 tons and 0.57 tons based on 12-month rolling time periods for the months of July and August 2024. This is well below the 22.5 tons/year that is required in SC I.2. I determined that they are complying with this table.

Compliance Determination

Based on the information gathered during this inspection and SLEIS submittal, I determined that they are complying with the conditions of PTI #369-06A.

NAME Brian Culley DATE 9/11/2024 SUPERVISOR