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

B622768978

| FACILITY: WYOMING ASPHALT PAVING INC |                               | SRN / ID: B6227           |
|--------------------------------------|-------------------------------|---------------------------|
| LOCATION: 470 12TH ST, PLAINWELL     |                               | DISTRICT: Kalamazoo       |
| CITY: PLAINWELL                      |                               | COUNTY: ALLEGAN           |
| CONTACT: Hannah Tanner,              |                               | ACTIVITY DATE: 08/10/2023 |
| STAFF: Cody Yazzie                   | COMPLIANCE STATUS: Compliance | SOURCE CLASS: SM OPT OUT  |
| SUBJECT: Scheduled Inspecti          | on                            |                           |
| RESOLVED COMPLAINTS:                 |                               |                           |

On August 10, 2023 Air Quality Division (AQD) staff (Cody Yazzie and Jared Edgerton) arrived at 470 North 12<sup>th</sup> Street, Plainwell Michigan at 1:30 PM to conduct an unannounced air quality inspection of Wyoming Asphalt Paving Co., Inc. (hereafter WAPC) SRN (B6227). Staff made initial contact with the office receptionist and stated the purpose of the visit. Marc Rachac, WAPC, Plant Manager, is the onsite contact and assisted Staff with a walkthrough of the facility along with questions regarding production and operating conditions. Hannah Tanner worked in the Office at the facility. Mrs. Tanner is responsible for some of the records at the facility that are required by PTI No. 813-92B.

WAPC is a hot mix asphalt facility that only uses 100% virgin materials to produce asphalt. The facility is a pug mill style plant. In this style of asphalt production the raw materials dried separately from the asphalt concrete addition and mixing. The facility produces 22 different mixes of asphalt with a majority of them being a base and top or inferred mixture. The facility operates seasonally typically starting up operation in the last week of April and shutting down in November. WAPC currently has around 18 employees and production hours during the week vary based on orders.

WAPC was last inspected by the AQD on June 27, 2019 and appeared to be in compliance at that time with 813-92B Staff asked, and Mr. Rachac stated that the facility does not have any boilers or emergency generators.

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

## **EUHMAPLANT:**

This emission unit includes the aggregate conveyors and the Batch Mix Drum. The facility loads the raw aggregate materials on to the conveyer which transport the materials to the Batch Mix Drum. The Batch Mix Drum is a dryer that is fired only by natural gas. The dryer is controlled by a dust collector that must be in operation while the equipment is being used.

Special Condition II.1 restricts WAPC from using any asbestos tailings or waste materials containing asbestos. Special Condition II.2 limits the asphalt mixture process in EUHMAPLANT to a maximum of 30 percent recycled asphalt materials. The facility complies with both of these special conditions by only using 100 percent virgin materials that are not asbestos tailings or waste materials. All asphalt mixtures are tracked daily and include the date, name of mixture,

percentage of asphalt cement and tons of stone. Staff was told that the AA material doesn't get measured physically but is tracked by subtracting other material from total overall material.

Staff did observe some opacity coming out of the SVHMAPLANT stack. At the beginning of the inspection Staff observed the stack from the south side of the stack for around 10 minutes. During this time Staff observed opacity emissions to be around 5-10% during the unofficial opacity reading. The permit does not include a specific opacity limit for the emission unit so the general 20% opacity on 6-minute average applies which is outlined in General Permit Condition 11.a.

WAPC is required to maintain and operate the equipped dust collector in a satisfactory manner, but does not have specific requirements on pressure drop readings or visible emissions readings. When asked about maintenance Mr. Rachac stated that the facility does take daily pressure drop readings on the baghouse to assist in knowing when maintenance should be performed, or bags should be replaced. These readings are recorded on the daily mix recipe sheets that records material used.

During the inspection Staff did observe the pressure drop reading on the baghouse. During the observations Staff noted that the pressure drop gauge did not appear to be working correctly. Mr. Rachac stated that he would work on fixing the gauge and any other repairs the baghouse may need. Records showed that the pressure was reading around 2 inches of water for the previous two weeks, which is within the normal operating range. On August 19, 2023 Mr. Rachac stated that he had replaced a number of bags in the baghouse which could be the source of the small amount of opacity observed and provided a video for Staff to view of the magnehelic pressure gauge working properly. Staff thinks that because the magnehelic gauge was not working properly and it appeared that bags needed to be changed this could be considered a violation of Special Condition IV.1 for not operating/maintaining the fabric filter dust collector in a satisfactory manner. Since the repairs appeared to be conducted in a relatively timely manner, the pressure gauge appeared to be working leading up to the inspection, and the facility didn't appear to have opacity readings over 20% opacity Staff thinks that the violation could be considered resolved. If the issue is continued to be observed in other inspections/site visits Staff believes it may be appropriate to send a violation at that time.

During the previous inspection it was noted that the there were fugitive emissions observed during the loading of trucks when the pug mill would open and at the top of the silo when that was being load. During the inspection Staff observed no trucks being loaded or the silo being load. This lead to no fugitive emissions from these units during the inspection. Staff should look at these areas in future inspections as it has been previously noted that there are potential for fugitive emissions.

## **EUYARD:**

This emission unit is fugitive dust sources at the facility including plant roadways, plant yard, material storage piles, and material handling operations (excluding cold feed aggregate bins). This emission unit has only Special Condition associated with it and is a process/operational restriction. The facility is required to wet the plant yards and roads as needed while the equipment is operating. When we arrived to conduct the inspection, Staff observed that the ground had recently been wetted. To perform the wetting of the yard and roads the facility uses a

front-end loader to spread water around the facility. The facility uses a small pond that is located on the property as a water source.

## **FGFACILITY:**

This flexible group includes all source wide equipment including grandfathered and exempt equipment. As a part of this flexible group the facility has a material limit which restricts the amount of HMA that the facility can produce per 12-month rolling time period. The facility is also required to comply with emissions limits for CO, NOx, Individual HAPs, and Aggregate HAPs.

The facility tracks daily the amount of HMA that is produced at the facility. This is then able to be used to calculate the monthly amount of HMA produced. WAP provided records that showed the facility has been well under the 440,000 TPY limit. Staff Reviewed Records for the period of January 2020 through July 2023 and the maximum 12-month rolling tons of HMA produced 65,995 Tons which occurred in June 2023.

The facility uses the monthly HMA production data to calculate CO, NOx, and HAPs that are associated HMA production. CO and NOx both use the emission factor that are MEARS emission Factors that are also included on the department industry fact sheet. This emission factor includes equipment such as hot elevators, screens, bins, mixer, and natural gas rotary drier. Some of the ancillary equipment like the hot oil heaters, silos, truck load out, and yard/storage pile emissions are calculated on a worst case basis at max operation during months the plant is operated. The facility uses EPA AP-42 emission factors for these calculations.

Since January 2020 the facility recorded the maximum amount of total CO emissions to be 13.4 TPY in June 2023. Total CO emission are well below the 90 TPY CO emission limit. In this same time period the maximum amount of total NOx emissions are calculated to be 1.5 TPY in June 2023. Total NOx emissions are well below the 50 TPY NOx emission limit.

HAPs emissions for HMA production equipment are calculated based on the amount of HMA produced at the facility. Facility is required to maintain records for individual HAPs and aggregate HAPs. The largest HAP that is emitted from HMA production equipment is calculated to be Xylene. The largest amount of Xylene that was emitted since January 2020 was 0.20 TPY from the HMA production equipment. The maximum total aggregate HAP emissions from HMA production equipment were calculated to be 0.6 TPY.

HAPs are also calculated for the ancillary equipment. HAP emissions from these emission units are minimal but still should be included as a part of the FGFACILITY emission limits. These emissions are calculated based on the maximum permitted 440,000 HMA production rate or operation time hours of 8,760 where appropriate. The additional aggerate HAP emissions are calculated to be 0.226 TPY at the identified production rate. With the facility being at about 14.9% of the production rate these emissions are an overestimation. The total aggregate HAP emissions are 0.826 TPY including the ancillary equipment and HAPs calculated from HMA production. This is well below the permit limit of 22.5 of aggregate HAP emissions.

In the previous inspection report it was noted that a letter was sent to the Air Pollution Control Division in Grand Rapids, Michigan from the United States Environmental Protection Agency (USEPA) on February 21, 1975. The letter discusses the transfer of ownership and relocation of an asphalt plant that was located in Ohio. The asphalt plant located in Ohio was a 4,000 lb batch

portable plant that the facility wanted to remove the wheels and permanently locate in the state of Michigan. USEPA responded that the plant described in the letter would not be subject to 40 CFR Part 60 Subpart I Standards of Performance for Hot Mix Asphalt Facilities. The facility may be subject to the NSPS Subpart I regulation in the future if the plant was to modify its operations. The facility does appear to have gone through any modifications or reconstructions that would require a permit modification or determination in change of applicably of NSPS Subpart I.

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. 813-92B besides the resolved baghouse maintenance issue. Staff stated to Mr. Rachac that a report of the inspection would be sent to the facility for their records. Staff concluded the inspection at 2:15 PM.-CJY

NAME Cody Yenni

DATE 9/13/23 SUPERVISOR Municipal