

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

B416471772

FACILITY: BOLEN ASPHALT PAVING, INC.	SRN / ID: B4164
LOCATION: 295 FAIRVIEW RD., WEST BRANCH	DISTRICT: Bay City
CITY: WEST BRANCH	COUNTY: OGEMAW
CONTACT: Matthew Bolen , Plant Supervisor	ACTIVITY DATE: 05/02/2024
STAFF: Nathanael Gentle	COMPLIANCE STATUS: Compliance
SUBJECT: Unannounced Scheduled On-site Inspection	SOURCE CLASS: SM OPT OUT
RESOLVED COMPLAINTS:	

On May 2, 2024, AQD staff conducted a scheduled, onsite inspection at Bolen Asphalt Paving, Inc, SRN B4164. AQD staff included Nathanael Gentle and Dillon King. The purpose of the inspection was to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; Michigan Department of Environment Great Lakes and Energy, Air Quality Division (AQD) Administrative Rules; and to evaluate compliance with the facilities Permit to Install (PTI), PTI No. 263-82N. AQD staff were assisted onsite by Mr. Matt Bolen. At the time of inspection, the facility was found to be in compliance.

Facility Description and History

Bolen Asphalt Paving, Inc owns and operates a propane fired hot mix asphalt (HMA) plant located at the Glancy Sand and Gravel Pit (SRN N6355) in West Branch Township, MI. The Glancy Sand and Gravel Pit is located at the end of Number 250 Road, east of South Fairview Road. The facility is located at approximately 44°19'51.7"N 84°12'12.3"W. A second HMA plant, owned and operated by Pyramid Paving & Contracting (SRN N7271), is also located at the Glancy Sand and Gravel Pit, west of Bolen Asphalt Paving, Inc. At the time of inspection, the Bolen Asphalt Paving HMA plant was operating. Staff reported the plant was started up for the season two days prior on 4/30/2024.

Bolen Asphalt and Paving operates under PTI No. 263-82N. PTI No. 263-82N was issued on March 3, 1998. The PTI was issued for the installation of a new baghouse on the existing HMA plant. The baghouse replaced the previous control device in place, a wet scrubber. Bolen Asphalt Paving is listed as synthetic minor source of particulate matter (PM) and a minor source of hazardous air pollutants (HAPS). As a synthetic minor source, the facility is required to report annual emissions. Annual emission reports have historically been submitted on time and complete. No complaints are of record for the facility since 2006. Bolen Asphalt Paving was last inspected in June 2021. At the time of the 2021 inspection, the facility was found to be in compliance.

Compliance Evaluation

PTI 263-82N

The HMA plant is a single drum, parallel flow plant. Staff report the drum of the plant was recently replaced within the last year or two. The old drum was observed onsite. The fuel source of the plant is propane, Special Condition (S.C.) 13. The plant consists of the following equipment, a single drum mixer, a control house, a primary control device (knock-out pot), baghouse, two

HMA silos with load-out, onsite propane tank, asphaltic concrete storage tanks, aggregate feeders with associated conveyors, assorted storage trailers, and a generator.

Special Condition 16. limits the total combined production of virgin HMA and RAP containing HMA to 750,000 tons per calendar year based upon a 12-month rolling time period. Staff report the plant typically produces approximately 100tpy. Records for the total tons of HMA produced during calendar year 2023 were requested and reviewed. Records for the tons of HMA produced per day are maintained. Calendar year 2023 records spanned from May 3, 2023, to November 18, 2023. A total of 108,213.91 tons of HMA were produced during calendar year 2023, well below the permitted limit of 750,000 tons.

The applicant shall limit the asphalt mixture to a maximum of 30% recycled asphalt material (RAP), S.C.24. The facility currently does not use RAP in asphalt mixtures produced. Staff report there is a possibility RAP may be incorporated in the future. The facility shall not use as a raw material any asbestos tailings or asbestos containing waste materials, as defined by the National Emission Standards for Hazardous Air Pollutants [40 CFR 61.143] regulations, in the hot mix asphalt plant, S.C. 26. Staff report the facility does not use materials such as asphalt shingles in their process. Records of the daily amount of virgin aggregate feed and amount of RAP feed to the drum mix asphalt plant were requested and reviewed for the month of July 2023. Records of the daily amount of virgin aggregate feed and amount of RAP feed to the drum mix asphalt plant are maintained as part of a daily report completed by operators. The daily report details the material loaded into each feeder and the percent and usage of each for the batch that was made that day. Records provided indicate RAP was not used in HMA produced during the period reviewed.

The particulate emission rate from the asphalt plant shall not exceed 0.10 pound per 1,000 pounds of exhaust gases, S.C.14. Testing to verify particulate emission rates is required following written notification of the requirement, S.C.18. At this time, testing to verify particulate emission rates has not been required. Visible emissions from the asphalt plant shall not exceed a 6-minute average of 20% opacity as specified in Rule 301(1)(a), S.C.15. At the time of inspection, excess visible emissions were not observed. Staff report the stack is periodically observed during operation for the presence of visible emissions.

The asphalt plant is equipped with baghouse control, S.C.19. The baghouse is reported to pulse every 7-8 seconds. Particulates collected in the baghouse are augured back to the mix drum, S.C.21. Staff report bags are checked periodically throughout the operating season. Black light inspections are conducted every year at the end of the season. Bags are replaced as needed. A supply of spare bags is maintained onsite. The baghouse is equipped with a device to indicate pressure drop across the fabric filters, S.C.20. At the time of inspection, the differential pressure was observed to be 5.2" H₂O. Daily records of the pressure drop across the fabric filters in inches water gauge were requested and reviewed for the month of July 2023. The baghouse pressure drop is recorded daily by operators as part of the plant daily report. During the period of records reviewed, the baghouse pressure drop recorded ranged from 4.6 to 5.2" H₂O.

Special Condition 23 stipulates the applicant shall not operate the asphalt plant unless the program for continuous fugitive emissions control for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix A has been implemented and is maintained. Staff report dust on site roadways is controlled using water by

filling the bucket of a front-end loader. Staff report dust from material stockpiles does not typically require dust suppression. Water treatment of site roadways is reported to be applied as needed. Records documenting dust suppression activities are maintained. Records of dust suppression activities were provided and reviewed for calendar year 2023. Dust control activities are documented in a Dust Control and Emissions Testing logbook. The facility records the date dust suppression activities are conducted and a description of the activities completed. The records provided demonstrate the facility is completing dust suppression activities and maintaining records.

Caterpillar C18 Genset Generator

During the onsite inspection, the facility was observed to have a generator installed. Staff reported the generator is a Caterpillar C18 genset. The unit is rated at 600 KW and is diesel powered. Staff report the engine was installed in 2017 and replaced a Caterpillar 3412 genset. The generator is reported to be used to power the plant when in operation. A copy of the Cat C18 Industrial Diesel Engine specification sheet was provided. Rule 285(2)(g) states the requirement to obtain a Permit to Install does not apply to internal combustion engines that have less than 10,000,000 Btu/hour maximum heat input. The maximum heat input of the engine was verified to be below 10,000,000 Btu/hour and appears to meet the PTI exemption rule. As a stationary compression ignition (CI) internal combustion engine (ICE), the generator appears to be subject to 40 CFR Part 60 Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. District staff conducted a review of the federal standard and applicability of the generator operated at the facility. Information provided by the facility indicates the engine is a non-emergency engine with an installation date of 2017. Engine specifications provided by the facility state the engine has a displacement of 18.1 l. 40 CFR 60.4204(b) states owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in § 60.4201 for their 2007 model year and later stationary CI ICE, as applicable. § 60.4201 details the emission standards that must be met by stationary CI internal combustion engine manufacturers. Compliance with 40 CFR Part 60 Subpart IIII is the responsibility of the facility. Facility staff are encouraged to review the standard in detail to ensure compliance is being maintained with all requirements.

NSPS Subpart I

40 CFR Part 60, Subpart I - Standards of Performance for Hot Mix Asphalt Facilities is a New Source Performance Standard (NSPS) established for hot mix asphalt facilities. Facilities that commence construction or modification after June 11, 1973, are subject to the subpart. Construction is defined in 40 CFR Part 60 Subpart A as fabrication, erection, or installation of an affected facility. Modification is defined in 40 CFR Part 60 Subpart A as follows, any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted. Previous inspection reports stated the facility was reported to be constructed in 1972 and was therefore exempt. As part of the inspection, AQD staff requested a subjectivity determination, including documentation to support the determination. In response, the facility provided a page from an appraisal of Bolen Asphalt Paving, Inc completed

by R.N. PFAFF and Associates on December 31, 2019. The document lists the Shearer Process Portable Drum Mix Plant with a 400 tph capacity as having a manufacturer date of 1972. Based on information provided, the facility does not appear to be currently subject to 40 CFR Part 60, Subpart I.

Summary

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NAME

DATE 6/3/2024

SUPERVISOR

