

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

B198671989

FACILITY: RIETH-RILEY CONSTRUCTION CO., INC.		SRN / ID: B1986
LOCATION: 724 EAST WASHINGTON, ZEELAND		DISTRICT: Grand Rapids
CITY: ZEELAND		COUNTY: OTTAWA
CONTACT: John Berscheid , Technical Services Manager		ACTIVITY DATE: 05/22/2024
STAFF: Chris Robinson	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY '24 on-site inspection to determine the facility's compliance status with applicable air quality rules and regulations including PTI no. 772-93 and no. 772-93A.		
RESOLVED COMPLAINTS:		

On May 22, 2024, Chris Robinson (CR) from the Department of Environment, Great Lakes, and Energy's (EGLE) Air Quality Division (AQD) conducted an onsite inspection at Rieth-Riley Construction Company, Inc. (SRN B1986) in Zeeland, Ottawa County, Michigan. Prior to arrival CR surveyed the perimeter of the plant for odors and visible emissions. A slight asphalt odor was observed but not at a level that was of a concern. Weather conditions were cloudy with a temperature of approximately 64oF and southwest winds at 16 mph with gusts up to 25 mph (www.weatherunderground.com).

Upon entry, AQD staff met with the Terminal Operator, Jay Jones, identification was provided, and CR informed him of the purpose of the visit which was to conduct a routine inspection to determine compliance with the facility's Permit to Install (PTI) 772-93 and no. 772-93A, and any other applicable air quality rules and regulations.

FACILITY DESCRIPTION

Rieth-Riley Construction Company, Inc. (Rieth-Riley) is a hot mix asphalt (HMA) batch plant with a counter-flow drum and a baghouse, top silo emission capture system and load out control system. Load out emissions are controlled by an electrostatic precipitator (ESP). The facility is located in an industrial area with the nearest resident being approximately 0.25 miles southwest.

COMPLIANCE EVALUATION

Rieth-Riley is a Title V opt out source for hazardous air pollutants (HAPS) and Carbon Monoxide (CO). This facility operates under two (2) permits, PTI No. 772-93 and 772-93A and is subject to 40 CFR Part 60, Subpart I – "Standards of Performance for Hot Mix Asphalt Facilities".

A) PTI No. 772-93

The plant is equipped with a baghouse and the plant is not operated unless the baghouse is operating properly. Maintenance is conducted as needed (See attached maintenance log). A Blacklight test was conducted on April 8, 2024, and filter bags are changed as needed based on differential pressure. At the time of the inspection DP was 1.5" w.c and Mr. Jones indicated that the proper operating range was approximately 1-4" w.c. The facility maintains a supply of blacklight powder at all times. The facility's truck loadout is equipped with an ESP. Visible emissions from the asphalt plant are limited to 5% opacity and truck loading operations (Loadout) and silos are limited to 0% opacity. Other than steam from the plant, no visible emissions were observed coming from the plant, silos, or loadout. Exhaust gases from this equipment are discharged unobstructed vertically through a stack. The stack is required to have a maximum diameter of 61" and a minimum height of 45-feet above ground level. CR did not explicitly verify these measurements, however observations appeared to confirm that they were being met. Also, Per Mr. Jones other than the

replacement of one of the four liquid asphalt tanks, there have been no changes to the equipment. The plant is permitted to operate on both Diesel fuel and natural gas, only natural gas is being combusted onsite.

This facility does not use asbestos containing materials and shingles are not used or recycled. Recycled Asphalt Product (RAP) is used but at a percentage of less than 50%. Based on the provided records the highest monthly average of RAP usage was 30.58% in June 2023.

The facility is prohibited from operating unless a program for continuous fugitive emissions control has been prepared and implemented for the plant roadways, yard, storage piles and all material handling operations. The facility has a Fugitive Dust Control Plan, received by the AQD on August 25, 2009. The plan is appropriate, and the facility is operating in compliance with those requirements. A sweeper has been brought onsite, since the previous AQD inspection, to help control track out and onsite roads. The facility is watering as needed, which was conducted prior to CRs arrival, puddling water was observed.

Particulate emissions from the plant are limited to 0.04 grains per dry standard cubic foot (g/dscf) of exhaust gases and an emissions rate of 15.6 lbs/hr per SC 15 of the PTI and the emission limits specified in the Standards of Performance for Hot Mix Asphalt Facilities promulgated in 40 CFR Part 60 Subpart I. Compliance with these limits are demonstrated by testing. AQD received a final test report on November 22, 1995, for testing that was conducted on October 10-11, 1995. The report states that sampling was conducted in accordance with US EPA Method 5 and visible emissions were determined using US EPA Method 9, both as required in 40 CFR Part 60 Subpart I. The average PM concentration for all three runs was 0.0028 g/dscf and the average lb/hr emission rate was 0.8159. Both are well under the limits specified in the PTI.

The facility is subject to a Nitrogen Oxide (NOx) emission rate of 18.7 lbs/hr and 82-tpy, a polynuclear aromatic hydrocarbon (PAH) emission rate of 0.16 mg per dry standard cubic meter, and a Sulfur dioxide (SO2) emission rate of 0.056 lbs/MMBTUs heat input (based on a 24-hour period). CR calculated the lb/hr emission rate for NOx based on the records provided. The maximum lb/hr rate was 6.9 (August 2023), while the maximum site calculated rolling 12/month total for NOx emissions is 4.54 tons (April 2023). Based on these records the facility appears to be operating within their NOx limits. Mr. Berscheit provided SO2 and PAH emission rate calculations. The SO2 emission rate is 0.00028 lb/MMBtu, and the PAH emission rate is 0.008 mg/dscf. Both are within the permitted limits. Additional testing for NOx and certain PAH emissions are allowed but not being required at this time.

B) PTI No. 772-93A

This permit contains facility wide federally enforceable (FGFACILITY) restrictions used to opt out of the Title V program. Therefore, Rieth Riley is subject to facility-wide HAP and CO emission limits of less than 9.0-tpy for any individual HAP, 22.5-tpy for all HAPs combined and 89.9-tpy for CO all of which are based on a rolling 12-month period. Monthly and 12-month rolling HAP and CO emissions were provided. HAP emissions were provided for May 2022 through April 2024 since the facility is shut down for part of the year. The individual HAP with the highest 12-month rolling emissions was Formaldehyde at 0.54 tons in April 2023. The month with the highest 12-month rolling emissions for combined HAPs was also April 2023 at 0.89 tons. HAP emissions appear to be

well under the permitted limits. The month with the highest 12-month rolling CO emissions was April 2023 at 22.7 tons, which is also under the permitted limit. CO tests are conducted at the beginning of each season, upon a malfunction of the drum dryer or it's associated burner and/or every 500 hours of operation. The most recent test was conducted on April 19, 2024, which is attached.

This facility is subject to a material limit of 875,000 tons of HMA paving materials for EUHMAPLANT per 12-month rolling time period. Based on records provided the month with the highest 12-month rolling total production was April 2023 at 348,867 tons, which is well under the limit.

C) Annual Emissions Inventory

The 2023 information was reported on time (March 8, 2024) and complete. The submittal was reviewed on April 30, 2024, and appeared complete with no changes required. The reported emissions are attached and summarized in the table below.

Pollutant	Amount (Tons)
CO	17.28
LEAD	<0.00001
NOX	3.71
PM10, PRIMARY	10.20
PM10, FLTRBLE	7.88
PM2.5, PRIMARY	3.02
PM2.5, FLTRBL	0.70
SO2	0.45
VOC	4.26

CONCLUSION

Based on observations and discussions made during the inspection and a subsequent review of the facility's records, Rieth-Riley's Ottawa County Asphalt Plant appears to be operating in compliance with applicable air quality rules and regulations including the requirements established in PTI No. 772-93 and 772-93A.

NAME 

DATE 6/14/2024

SUPERVISOR 