DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

B198654614

FACILITY: RIETH-RILEY CONSTRUCTION CO., INC.		**SRN / ID:** B1986
LOCATION: 724 EAST WASHINGTON, ZEELAND		**DISTRICT:** Grand Rapids
CITY: ZEELAND		**COUNTY:** OTTAWA
CONTACT: John Berscheit , Technical Services Manager		**ACTIVITY DATE:** 08/17/2020
STAFF: Chris Robinson	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: FY '20 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 August 13, 2020, Chris Robinson (CR) from the Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) conducted an onsite inspection of Rieth-Riley Construction Company, Inc. (SRN B1986) in Zeeland, Ottawa County, Michigan. Per recent field work guidance CR contacted John Berscheit, Rieth Riley's Technical Services Manager, prior to arrival to ensure proper staff would be onsite as well as to prepare for any Covid19 related entry procedures. CR met with Terminal Operator Jay Jones and informed him of the purpose of the visit. Proper PPE and social distancing were maintained throughout the inspection.

Per Mr. Jones there have been no equipment modifications or additions since the last inspection conducted on August 30, 2016. Mr. Berscheit provided requested records.

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. The facility is located in an industrial area with the nearest resident being approximately 0.25 miles southwest.

COMPLIANCE EVALUATION

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

A) PTI No. 772-93

As required by Special Condition (SC) 18 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 at the beginning of the season (4/2/2020) and bags are changed as needed. The facility maintains a supply of blacklight powder at all times. The facility's odor control system for the truck loading operations consists of loadout control equipped with an ESP as required by SC 23. Special Condition 16 limits visible emissions from the asphalt plant to 5% opacity and SC 29 limits visible emission from the truck loading operations (Loadout) and silos to 0% opacity. Other than moisture from the plant, no visible emissions or odors were observed coming from the plant, silos, or loadout. Exhaust gases from this equipment is discharged unobstructed vertically as required by SC 19. This condition also requires a maximum stack diameter of 61" and a minimum height of 45-feet above ground level. Although CR did not explicitly verify these measurements observations appeared to confirm that they were being met. Also, Per Mr. Jones there have been no changes to the equipment. Plant fuel has not changed (SC 21) and the equipment still only operates on natural gas.

This facility does not use asbestos containing materials as prohibited by SC 30 and shingles are not used or recycled. Recycled Asphalt Product (RAP) is used but at a percentage of less than 50% as allowed by SC 20. In fact, based on the provided records for August 2019 through July 2020 the highest monthly average of RAP was 32% for August 2019, September 2019 and again in June 2020.

Special Condition 22 prohibits the facility from operating the plant 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 was watering the facility upon arrival using a water truck. Although this method appeared to be affective it was not adequate to control truck track out. CR has been by this area several times this year and has observed unacceptable track out in North Fairview street, which was also noted by

another AQD staff. CR discussed this with Mr. Jones and the facility immediately arranged to have the road swept. CR also informed Mr. Jones that in order to properly control/prevent track out Rieth-Riley may need to sweep onsite roadways, which is required by the permit. The facility has a Fugitive Dust Control Plan, received by the AQD on August 25, 2009. CR confirmed with Mr. Berscheit that this is the most current version. The plan still seems to be appropriate as long as Rieth-Riley implements it. Requirement 2.a requires water, vacuuming or sweeping to control fugitive dust and track out.

a. During the operating season the paved plant roads shall be treated with water, vacuumed, or swept in a manner that minimizes the introduction of dust to the ambient air to control fugitive dust emissions and track-out dust. This will occur as dictated by weather conditions and vehicular activity. The dust control method shall be acceptable as determined by the District Supervisor.

Recent observations seem to indicate that the facility is not in compliance with this requirement. However, a violation letter will not be issued. The facility may be monitored to ensure that they are properly addressing the issue.

Particulate emissions from the plant are limited to 0.04 grains per dry standard cubic foot (g/dscf) of exhaust gases and 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 both the federal standard and the PTI. In addition CR used monthly particulate emissions (tons) and operating hour records for the plant to calculate the lb/hr particulate emissions for August 2019 through July 2020. The month with the highest PM emissions was 10.93 lbs. in October 2019, which is below the limit of 15.6 lbs.

The facility is subject to a Nitrogen Oxide (NOx) emission rate (SC 24) of 18.7 lbs/hr and 82-tpy, a polynuclear aromatic hydrocarbon (PAH) emission rate of 0.16 mg per dry standard cubic meter (SC 26), 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 by the facility for August 2019 through July 2020. The minimum lb/hr rate was 25.83 (August 2019) with a max of 32.71 (October 2019). The maximum 12-month rolling annual total was 20.22 tons (July 2020). Based on these records the facility is operating within the annual NOx limit but had exceeded the lb/hr limit of 18.7. CR discussed this with Mr. Berscheit. This facility is permitted to use oil and/or natural gas for fuel. When the permit was initially drafted the facility used a worse-case AP-42 emissions factor of 0.12lb/hr for consuming oil for fuel. This emission factor has been carried through ever since even though only natural gas is being used. The 18.7 lb/hr NOx limit would limit the facility's oil usage. Applying this emission factor to a larger volume of fuel used like natural gas, would certainly exceed the emission limit. Mr. Berscheit provided revised records using an AP-42 emission factor for asphalt plants using natural gas (0.026) which now corresponds to the MAERS emission factor, which Rieth Riley uses for their annual submittals. Based on the revised records the maximum lb/hr NOx emission rate is 5.58 for the month of April 2020, which is well below the limit. Any future use of oil at this facility will again require an emission factor revision.

Mr. Berscheit provided SO2 and PAH emissions. The SO2 emission rate was 0.00056 lb./MMBtu and the SO2 emission rate was 0.008 mg/dscf. Both within the permitted limits. Additional testing for NOx and certain PAH emissions as allowed per SC 25 and SC 27 is not being required at this time.

B) PTI No. 772-93A

This permit contains federally enforceable facility wide (FGFACILITY) restrictions used to opt out of the Title V program. 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 is based on a rolling 12-month period. Monthly and 12-month rolling HAP and CO emissions were provided for the time period of September 2018 through August 2020. The calculated annual maximum combined HAP emissions was for July 2020 at 7.61 tons, which is under both the individual and aggregate HAP limits. The Maximum CO emission rate was 33.87 tons in July 2020, 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, CO data and operating hours between tests are 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 for August 2019 through July 2020 the month with the highest 12-month rolling total production was July 2020 at 337.021 tons, which is well under the limit.

C) MAERS

Actual annual emissions are calculated by the facility using MAERS emission factors. The 2019 information was reported on time to MAERS (February 28, 2020). The submittal was reviewed on April 3, 2020 and appeared complete with no changes required. The reported emissions are attached and summarized in the table below.

Pollutant	Amount	
	Lb.	Tons
CO	36,907.91	18.45
LEAD	0.17	0.0001
NOX	8,062.26	4.03
PM10, FLTRBLE	17,737.35	8.87
PM10, PRIMARY	6,458.88	3.23
PM2.5, FLTRBL	4,258.61	2.13
SO2	968.20	0.48
VOC	9,098.63	4.55

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.

Image 1(Track Out) : Southern exit looking east along North Fairview Road

NAME  DATE 9/18/2020 SUPERVISOR