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

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RUCTION CO INC	SRN / ID: N2184					
ROSCOMMON	DISTRICT: Cadillac					
	COUNTY: ROSCOMMON					
inical Services Manager	ACTIVITY DATE: 08/31/2021					
COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT					
	RUCTION CO INC ROSCOMMON nical Services Manager					

Full Compliance Evaluation of the Rieth Riley Houghton Lake asphalt plant including site inspection and records review to determine the facility's compliance with Permit to Install (PTI) No. 466-89J and the air pollution control rules. During the on-site inspection I met with Doug Sebert the plant operator who was running the plant, answered my questions and provided the records maintained on site.

<u>EUHMAPLANT</u> – One hot mix asphalt facility consisting of the 400 tons per hour aggregate conveyors, 345 tons per hour counterflow drum mixer, and a baghouse for PM control. At the time of the inspection the drum dryer had just shut down, though asphalt was still in the silos and trucks were still being loaded. There were no visible emissions from the top of the silos. The loadout area is not required to be enclosed and is not. Some vapors were visible from the truck loadout with minimal odors. This is not a problem at this well isolated location. There are no AC Tank requirements in this PTI but I did observe the two AC tanks. The tanks did not appear to condensers on them (not required) and I did not detect any significant odors.

Emission Limits – Compliance with the concentration limits and pound per ton of hot mix asphalt (HMA) limits is demonstrated through calculations based on throughputs and emission factors. Stack testing is not required though it may be requested if needed. Records provided by Reith-Riley indicated compliance with the aforementioned limits in the PTI.

	Pollutant	Equipment	Limit	Time Period
РМ		EU-HMAPLANT	0.04 gr/dscf	U.S. EPA Test Method 5
РМ		EU-HMAPLANT	0.04 lb./ton HMA	12 month rolling time period
со		EU-HMAPLANT	0.201 lb/ton HMA	U.S. EPA Test Method
CO		EU-HMAPLANT	89.9 tpy	12 month rolling time period
SO <sub>2</sub>		EU-HMAPLANT	0.084 lb/ton HMA	U.S. EPA Test Method
SO <sub>2</sub>		EU-HMAPLANT	89.5 tpy	12 month rolling time period
NOx		EU-HMAPLANT	0.12 lb/ton HMA	U.S. EPA Test Method

Pollutant	Equipment	Limit	Time Period
NO <sub>x</sub>	EU-HMAPLANT	89 tpy	12 month rolling time period
Lead	EU-HMAPLANT	2.0x10 <sup>-6</sup> lb./ton	U.S. EPA Test Method
Hydrogen Chloride	EU-HMAPLANT	0.006 lb./ton	U.S. EPA Test Method

The tons per 12 month rolling time period emissions are calculated at the end of each month. The calculations use emission factors contained in the PTI. Records (attached) submitted by the company upon request indicate compliance with the emission limits. The highest 12 month rolling time period emissions occurring in June 2021 with the following reported emission rates:

Particulate Emissions 4.40 Tons

Nitrogen Oxide Emissions 13.21 Tons

Sulfur Dioxide Emissions 9.24 Tons

Lead Emissions 0.00 Tons

HCL Emissions 0.66 Tons

Material Limits – Recycled asphalt pavement (RAP) is limited to 40%, based on a monthly average. RAP usage is tracked each day and entered in the daily Plant Operator Log sheet. Records indicate that the 12 month rolling averages range between 18.54% and 22.26%.

Fuel burned in the dryer/mixer drum is limited to natural gas, propane, butane, Nos 2, 4, 5, 6 fuel oil, or specification recycled used oil (RUO). At the time of the inspection the plant is (and has been) running only on propane.

Process/Operation Restrictions – Total HMA production per 12 month rolling time period is limited to 895,000 tons. Records indicate the facility is well below the permit limit. The highest 12 month rolling average plant HMA production was 220,084 tons.

The permit contains appendices for the Fugitive Dust, PM, SSM, and RUO compliance plans. The RUO compliance plan is not currently applicable. The plant appeared to be running in accordance with the other plans.

Equipment – Preventative maintenance performed on the baghouse consisted of black light leak checks. The most recent check was conducted on 4/22/21, no bags were required to be replaced. Records inspected at the plant site indicate the differential pressure across the baghouse averages around 4.2 inches water gauge, which is within the acceptable 2" - 8" range.

Testing – the permit states that stack testing may be required but it appears that the AQD has not requested stack testing in the past.

Monitoring – CO monitoring is required at the startup of each paving season, upon a malfunction of the drum burner, and every 500 hours of operation. The results of the monitoring are required to be recorded and made available to the AQD upon request. I reviewed records from 2020 (tester printout dated 2024) and 2021. CO readings appeared to average around 400 ppm.

Recordkeeping/Notification/Reporting – Daily production records are maintained on the plant computer and are used to generate the required monthly and 12 month rolling average throughput and emission records (attached). Printouts were available for review as were the daily plant logs that were filled out with data from the computer printout.

Virgin aggregate feed rates, liquid asphalt feed rates, and product temperature were continuously monitored and recorded.

RUO is no longer used so these recordkeeping requirements are not currently applicable.

Plant maintenance records and emission calculation records are maintained and were provided following the inspection (attached).

Stack/Vent Restrictions – During the inspection, the stack appeared to meet the 51 inch maximum diameter and 82 ft. minimum height parameters listed in the PTI.

<u>EUYARD</u> – Fugitive dust sources associated with the HMA facility, consisting of all plant roadways, the plant yard, all material storage piles, and all material handling operations except cold feed aggregate bins.

Emission Limits – There are no emission limits associated with this emission unit; therefore, this section is not applicable.

Material Limits – There are no material limits associated with this emission unit; therefore, this section is not applicable.

Process/Operational Restrictions – The facility is not allowed to operate unless the Fugitive Dust Control Plan located in Appendix C of the PTI is implemented. At the time of the inspection, there were no visible emissions form the storage piles or from the front end loader traffic. A contractor provides dust suppressant application on an as needed basis, usually two times per months according to plant personnel.

Equipment – There are no equipment restrictions associated with this emission unit; therefore, this section is not applicable.

Testing – There are no testing requirements associated with this emission unit; therefore, this section is not applicable.

Monitoring – There are no monitoring requirements associated with this emission unit; therefore, this section is not applicable.

Recordkeeping/Reporting/Notification – Fugitive dust emissions using AQD approved emission factors were calculated and reported to the Michigan Air Emission Reporting System as required by the PTI.

Stack/Vent Restrictions – There are no stack or vent restrictions associated with this flexible group; therefore, this section is not applicable.

EUSILOS -Two HMA product storage bins.

Emission Limits - There are no emission limits associated with this emission unit; therefore, this section is not applicable.

Material Limits - There are no material limits associated with this emission unit; therefore, this section is not applicable.

Process/Operational Limits - The capture system installed on the top of each HMA silo appeared to be operating properly as there were no visible emissions from the system. There is no requirement for an enclosed loadout area.

Equipment - There are no equipment requirements associated with this emission unit;

therefore, this section is not applicable.

Testing - There are no testing requirements associated with this emission unit; therefore, this section is not applicable.

Monitoring - There are no monitoring requirements associated with this emission unit; therefore, this section is not applicable.

Recordkeeping/Reporting/Notification - There are no recordkeeping, reporting, or notification requirements associated with this emission unit; therefore, this section is not applicable.

Stack/Vent Restrictions - There are no stack or vent restrictions associated with this emission unit: therefore, this section is not applicable.

FG-FACILITY - All equipment at the facility including equipment covered by other permits, grandfathered equipment and exempt equipment.

Emission Limits - Hazardous air pollutant (HAP) emissions are limited to 8.9 tons per 12 month rolling time period for a single HAP and 22.4 tons per 12 month rolling time period for aggregate HAPs. The Permit to Install requires HAP emission calculation recordkeeping to demonstrate compliance with the emission limits. Based on records provided by Rieth-Riley. HAPs emissions are well below the emission limits.

Material Limits - There are no material limits associated with this flexible group; therefore, this section is not applicable.

Process/Operational Limits - There are no process or operational limits associated with this flexible group; therefore, this section is not applicable.

Equipment - There are no equipment requirements associated with this flexible group; therefore, this section is not applicable.

Testing - There are no testing requirements associated with this flexible group; therefore, this section is not applicable.

Monitoring - There are no monitoring requirements associated with this flexible group; therefore, this section is not applicable.

Recordkeeping/Reporting/Notification - There are no recordkeeping, reporting, or notification requirements associated with this flexible group; therefore, this section is not applicable.

Stack/Vent Restrictions - There are no stack or vent restrictions associated with this flexible group; therefore, this section is not applicable.

CONCLUSION – Based upon the on-site inspection and records review. AQD staff considers to the facility to be in compliance with PTI No. 466-89G and the air pollution control rules at this time.

NAME A

DATE \_\_\_\_\_\_ SUPERVISOR \_\_\_\_\_