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

N724659990		
FACILITY: RIETH-RILEY CONSTRUCTION CO., INC.		SRN / ID: N7246
LOCATION: 08699 Woodward Road, ELMIRA		DISTRICT: Cadillac
CITY: ELMIRA		COUNTY: CHARLEVOIX
CONTACT: John Berscheit , Asphalt Plant Specialist		ACTIVITY DATE: 09/16/2021
STAFF: Kurt Childs	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: 2021 FCE.		
RESOLVED COMPLAINTS:		

2021 Full Compliance Evaluation (FCE)

I conducted an FCE inspection and records review on 9/22/2021. The Rieth-Riley Hudson plant is an ROP opt-out source operating under PTI 75-03C. The plant began operation for the 2021 season on April 22, 2021. The PTI covers emission units for the hot mix asphalt plant (EUHMAPLANT), plant yard (EUYARD), asphalt cement tanks (EUACTANKS), and storage silos (EUSILOS) as well as a flexible group for the entire facility (FGFACILITY). PTI 75-03C was issued to increase the allowable amount of RAP that could be used in the HMA mix from 30% to 50%. The permit has previously been revised to increase the allowable halogen concentration in recycled used oil (RUO) used at the facility to 4000 ppm. RUO is no longer used at this facility. During the inspection I met with the plant operator Mr. Brian Sobleski, John Berscheit is the MAERS contact as well as the contact for any air permit issues and records that are not maintained at the plant.

At the time of the inspection the skies were clear and winds were around 10mph from the west. The air temperature was 70 degrees F.

EUHMAPLANT

The asphalt plant is a Gencor unit and includes the following equipment:

1. Raw material feed for aggregate and RAP each including bins (7 for agg., 2 for RAP) a screen and conveyors.

- 2. Asphalt tanks (3).
- 3. Tack tank (1).
- 4. Used oil tanks (2).
- 5. Asphalt tank heater (natural gas fired).
- 6. Drum dryer. (drum replaced prior to the 2021 season)
- 7. Baghouse.

At the time of the inspection the asphalt plant was operating and I did not observe any visible emissions from the baghouse stack or fugitive emissions from the material handling equipment. This plant is rated for 350 tons per hour but normally does not run above 300. The plant is still burning natural gas and no longer uses RUO.

There were no recent shipments or use of RUO so there were no recent analysis to be reviewed. At this time Reith Riley plans to continue using natural gas.

The plant is equipped with a computer system that monitors and displays each operating variable. The plant operator maintains a "Plant Foreman's Daily Report" (PFDR). Much of the recordkeeping data is available from this report.

The asphalt plant is equipped with a baghouse as indicated above, there were no visible emissions though the plant was running. The baghouse differential pressure was 4.6" WC which is within the required range of 2" -8". Plant records indicate the typical differential pressure is between 2" - 3". The PTI requires a minimum differential pressure of 2" WC unless a large number of bags have been changed or other acceptable conditions exist and indicates the proper operating range is 2-8" WC.

PTI 75-03C limits RAP usage to 50% of the asphalt mixture based on a monthly average. Plant records observed during the inspection indicated that RAP usage has been around 20% in 2021. Plant records provided by Rieth-Riley indicate the annual average RAP usage in RAP mixes for is slightly higher (22% - 24%).

The plant is limited to 490,000 tons of HMA production per year. Plant records indicate 135,427 tons were produced during 2020. Plant records indicate the 2020 MAERS records also indicate the following annual air contaminant emissions:

PM = 13,948 lbs.

CO = 17,689 lbs.

NOx = 3,982 lbs

SO2 = 465 lbs.

VOC = 4,363 lbs.

Lead = 0.08 lbs.

Plant records show the highest 12 mos. rolling average emissions (September 2020) were:

Particulate Emissions 2.96 Tons (5,920 lbs)

Nitrogen Oxide Emissions 8.89 Tons (17,780 lbs)

Sulfur Dioxide Emissions 1.85 Tons (3,700 lbs)

Lead Emissions 0.00 Tons

HCL Emissions 0.44 Tons (880 lbs)

Co Emissions 14.89 Tons (29,780 lbs)

H2S04 Emissions 0.24 Tons (480 lbs)

These are equivalent to the emission limits in pounds per ton since the emission limits are the emission factors used in the calculations.

EUHMAPLANT has been stack tested for HAPs and PM. Testing has not been conducted for other criteria pollutants though CO emissions are checked annually using a portable CO monitor for the purpose of tuning the drum mixer burners. Results of the HAPS testing indicated emissions were below the emission limit/factors. Records of the CO testing were maintained and provided. Tests provided were conducted on 7/08/20 and 5/25/21, Results indicate CO concentrations in the 300 ppm - 400 ppm range which is normal and indicates proper combustion (<500 ppm).

I also reviewed maintenance records that were up to date and included black light inspections of the baghouse. According to these records, one bag was replaced at the start of the 2021 season. Following the inspection I requested the monthly reports from Rieth Riley that summarizes the weekly plant reports and are attached. The records indicate that all data required by the PTI is being collected and indicates compliance with the PTI. The monthly data is included as are updated 12-month rolling totals.

Aside from the replacement of the drum, there have been no changes to EUHMAPLANT including stack parameters which appear to comply with the PTI.

EUYARD

R-R has an approved fugitive dust plan (attached as Appendix A to the PTI) and appeared to be in compliance with all aspects. At the time of the inspection, the location of EUHMAPLANT was paved as was the road used by haul vehicles and a paved storage area adjacent to the truck loadout. Working areas of the gravel pit that the vehicles must travel through are not paved but are treated with water or dust suppressant as needed. Plant records included dates of watering or dust suppressant treatment. At the time of the inspection it had been dry for several days and it was warm, sunny with a light breeze. Some dust was being raised by traffic and the road areas were probably due for cleaning and watering. Speed limit signs were posted and there did not appear to be any fugitive dust from storage piles. Drop heights from conveyors and from the loader appeared to be minimized. The MAERS report for this facility did use the correct emission factors for fugitive dust reporting (MAPA Worksheet).

EUACTANKS

The tanks were equipped with a vapor condensation and recovery system that was operating properly. There were no visible emissions or odors. The natural gas fired asphalt tank heater is not subject to either the Major or Area source boiler and process heater NESHAPs because process heaters are not subject to Subpart JJJJJJ and Natural gas fired process heaters are not subject to Subpart DDDDD.

EUSILOS

The silos are equipped with an emissions capture system that routes emissions back to the burner of the drum mixer. The loadout is equipped with an enclosure that is vented to a "blue smoke" system. I observed several trucks being loaded and there were no fugitive emissions from the loadout area but light visible emissions were present from the blue smoke vessel stack shortly after loading.

FGFACILITY

Monitoring and recordkeeping for FGFACILITY is maintained and records were available and up to date (copy attached).

As a result of the inspection, records review and MAERS review the facility appeared to be in compliance with PTI 75-03C and the Air Pollution C

NAME _____

DATE _____ SUPERVISOR _____