

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

N824953652

FACILITY: MATHY CONSTRUCTION CO PLANT 67		SRN / ID: N8249
LOCATION: PORTABLE ASPHALT PLANT 67 #71-09A, IRONWOOD		DISTRICT: Upper Peninsula
CITY: IRONWOOD		COUNTY: GOGEBIC
CONTACT: Patrick Paulino ,		ACTIVITY DATE: 05/19/2020
STAFF: Sydney Bruestle	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Records Review to verify compliance with PTI 71-09A and all other applicable state and federal air quality regulations		
RESOLVED COMPLAINTS:		

On May 15, 2020 I (Sydney Bruestle) received records from Mathy Construction Plant No. 67 for the 2019 operating year. Permit to Install (PTI) 71-09A covers a portable asphalt plant that mostly operates in Wisconsin. The plant operated in Michigan summer 2019. I requested all records required by PTI 71-09A and 40 CFR Part 60 Subpart I from Patrick Paulino via Email on May 11, 2020. Below is a summary of the records Mr. Paulino sent me.

**EUHMAPLANT**

*Description: Hot mix asphalt (HMA) facility including aggregate conveyors, counterflow drum mixer, fabric filter dust collector.*

**Emission Limits:**

Pollutant	Limit	Actual
PM	0.04 gr/dscf	0.014 lb/ton
PM	0.025 lb/ton	
CO	0.201 lb/ton	0.13 lb/ton
CO	50.25 tpy	0.31 tpy (2019)
SO2	0.146 lb/ton	0.058 lb/ton
NOx	0.1225 lb/ton	0.055 lb/ton
Lead	2.0x10 <sup>-6</sup> lb/ton	1.5E-6 lb/ton
Benzene	0.001 lb/ton	0.00039 lb/ton
Toluene	0.006 lb/ton	0.0029 lb/ton
Ethylbenzene	0.001 lb/ton	0.00024 lb/ton
Xylene	0.001 lb/ton	0.0002 lb/ton
Naphthalene	0.001 lb/ton	0.00065 lb/ton
Formaldehyde	0.01 lb/ton	0.0031 lb/ton
Acrolein	0.001 lb/ton	2.6 E-5 lb/ton
Arsenic	1.0x10 <sup>-6</sup> lb/ton	5.6E-07 lb/ton
Nickel	1.0x10 <sup>-4</sup> lb/ton	6.3E-05 lb/ton
H2SO4	0.0098 lb/ton	0.00014 lb/ton
Manganese	5.0x10 <sup>-5</sup> lb/ton	7.7E-6 lb/ton

September and October 12 month rolling calculations are attached to the hard file of this report. The facility only operated 2 days in September 2019 and 12 in October 2019.

**Material Limits:**

(SC II. 1) Mathy Construction Plant 67 burns fuel oil, recycled used oil, propane, or natural gas. In 2019 the plant used 51,240 gallons of used fuel oil. (SC II.2) A used fuel oil analysis from September 2019 is attached to the hard copy of this report. Below is a table summarizing the analysis and comparing the values to permit limits:

Property	Permit Limit	Analysis Result
Arsenic	5.0 ppmw	<1.0 ppm
Cadmium	2.0 ppmw	<0.10 ppm

Chromium	10.0 ppmw	<4.0 ppm
Lead	100.0 ppmw	6.62 ppm
PCBs	1.0 ppmw	Non detect
Total Halogens	1000.0 ppmw	<200 ppm
Sulfur	1.5 % by weight	0.2441 % by weight
Minimum Flash Point	100 F	177 Deg F
Maximum Ash Content	1.0 % by weight	0.53 % by weight

(SC II. 4) While at the Northwoods Paving Quarry the facility processed around 18% RAP material, this is less than the permit limit of 30% based on a monthly average. (SC II. 5) Through December 2019 plant 67 processed 27, 604.9 tons of HMA paving material, this is less than the 500,000 ton/year limit in PTI 71-09A. (SC II. 6) The plant's daily Processed HMA ton/hr from September- October 2019 (duration of operation in Michigan) ranged from 190-254 ton/hr (records are attached to the hard copy of this report), this is below the permit limit of 350 tons/hr.

**Process/Operational Restrictions:**

(SC III 1-4) The facility has implemented and maintained the following operation plans: fugitive dust control plan (for EUYARD), a preventative maintenance program, an emission abatement plan for startup shutdown and malfunctions, and a compliance monitoring plan for the recycled used oil. (SC III. 5) The facility last performed a burner tune up on 10/1/2019.

**Design/Equipment Parameters:**

(SC IV. 1) Mathy Construction continuously monitors the pressure drop across the fabric filter dust collector for plant 67. The pressure drop on 10/1/2019 was records as 4.5 in WC, this is within the permit range of 2-10 in WC.

**Monitoring/Recordkeeping:**

(SC VI. 2) The virgin aggregate feed rate and RAP feed rates are recorded continuously (Records for 2019 Michigan operations are attached)

(SC VI.3) CO emissions are recorded upon the start up of each paving season, malfunction of the drum dryer or associated burner, and after every 100,000 tons of asphalt production. A copy of the last CO measurements taken on 10/1/2019 are attached to this report, CO values are all below the permit limit of 500 ppmv (values are around 300-400 ppm).

(SC VI. 5) Mr. Paulino sent me a copy of the maintenance log for 2019 (a copy is attached to this report)

(SC VI. 6-7) Mathy Construction records fuel type/amount combusted, Fuel analysis specs, tons of HMA produced (including % RAP), and feed rates for virgin aggregate and RAP for plant 67. When a new mix in introduced the time and new mix design are also records. 2019 records for these operating parameters are attached to the hard file of this report.

(SC VI. 8-10) The following records are attached to the hard copy of this report: monthly and 12 month rolling time period emission calculation records of all criteria pollutants and TACs listed in the emission limit table above, CO emission calculations related to production data, monthly and 12 month rolling time period records of the amount of HMA paving materials produced from EUHMAPLANT.

EUYARD: Annual fugitive emission calculations for EUYARD were done in MAERS. These calculations are attached to the hard file of this report.

**FGFACILITY:**

**Description:** All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.

**Emission Units:** EUHMAPLANT, EUYARD, EUTANKS, EUSILOS

**Emission Limits:**

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Pollutant	Limit	Actual
CO	50.25 tpy	1.48 tpy
Each Individual HAP	Less than 9.0 tpy	September 2019 and October 2019 HAP emission calculations are attached to the hard copy of this report
Aggregate HAPs	Less than 22.5 tpy	

After reviewing the submitted records, it appears Mathy Construction Plant 67 is in compliance with PTI 71-09A and all other applicable state and federal air quality regulations.

NAME Suzanne

DATE 5-28-20 SUPERVISOR Ed

