

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

P100954226

FACILITY: Mathy Construction Plant #43		SRN / ID: P1009
LOCATION: Wiermeri Pit, N11520 Junet Road, IRONWOOD		DISTRICT: Upper Peninsula
CITY: IRONWOOD		COUNTY: GOGEBIC
CONTACT: Patrick Paulino, Environmental Manager		ACTIVITY DATE: 07/13/2020
STAFF: Michael Conklin	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Targeted inspection for FY 20.		
RESOLVED COMPLAINTS:		

Facility: Mathy Construction Plant 43 (SRN: P1009)
Location: N1520 Junet Road, Ironwood, MI 49938
Contact(s): Patrick Paulino, Environmental Manager, 608-779-6348

Regulatory Authority

Under the Authority of Section 5526 of Part 55 of NREPA, the Department of Environment, Great Lakes, and Energy may upon the presentation of their card, and stating the authority and purpose of the investigation, enter and inspect any property at reasonable times for the purpose of investigating either an actual or suspected source of air pollution or ascertaining compliance or noncompliance with NREPA, Rules promulgated thereunder, and the federal Clean Air Act.

Facility Description

Mathy Construction Company (Mathy) is a producer and supplier of hot mix asphalt (HMA) and crushed aggregate for construction projects. The company is based out of Onalaska, WI, and contains facilities throughout Minnesota, Wisconsin, Iowa, and the Upper Peninsula of Michigan. Plant 43 is a new portable HMA plant that is operating under Permit to Install (PTI) No. 52-19. The plant is considered a continuous, counter-flow drum dryer/mixer plant with an HMA production capacity of 400 tons per hour. The drum dryer contains a 75 MMBtu/hr burner capable of burning recycle used oil (RUO), No. 2 through 6 fuel oil, natural gas, propane, and butane. The HMA plant consists of aggregate and reclaimed asphalt pavement (RAP) storage piles, cold feed bins, conveyors, screens, drum dryer, fabric filter collector, hot asphalt cement storage tanks, diesel fired engine, fuel storage tank, silos, loaders, and haul trucks.

Process Description

HMA is produced by the drying and mixing of aggregate, RAP, and liquid asphalt cement. HMA plants can be categorized as either batch or continuous mix. Continuous mix plants are further subdivided based on the type of dryer, which can be either a parallel-flow drum or counter-flow drum.

The HMA process begins with the transfer of aggregate, consisting of sand and crushed rock, from storage piles into cold aggregate feed bins. From the bins, material is dispensed onto conveyors that transport the material into screens and then into the drum dryer. In a counter-flow drum dryer, the aggregates are moved through a rotating drum in the opposite direction from the burner flame. The drum is inclined with the aggregate feed chute located at the top and the dryer burner located at the bottom. RAP materials are added at the midpoint of the dryer drum and asphalt cement is introduced in the lower end of the drum, usually in the last 10 to 12 feet, where rotation of the drum coats the aggregate with asphalt cement. The asphalt cement mixing zone is located behind the burner flame zone to prevent direct contact with the flame. The quantities of the type and size of aggregate are determined from the control room. After exiting the dryer, HMA is conveyed to storage silos where it is then loaded into trucks to be hauled off-site.

Emissions

The primary source of emissions from all three types of plants is the drum dryer. Air contaminants emitted include PM from aggregate drying and gaseous pollutants from the products of combustion from the burner. The gaseous pollutants consist of sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC). The quantities of gaseous pollutants emitted varies based on the type of fuel being burned and operating parameters. A fabric filter collector is primarily used as PM control for the dryer. Other sources of emissions at HMA plants include fugitive emissions of PM and VOCs from storage silos, truck load-out operations, liquid asphalt cement storage tanks, aggregate storage and handling, and vehicle traffic. Dust suppressants, such as water or calcium chloride, can be used to control fugitive PM emissions.

Emissions Reporting

Mathy Plant 43 is a synthetic minor source and is subject to the New Source Performance Standards (NSPS), Subpart I – Standards of Performance for Hot Mix Asphalt Facilities. This facility is required to report its annual emissions to the Michigan Air Emissions Reporting System (MAERS). For 2019, the plant reported producing 0 tons of asphalt in Michigan. The table below shows the facility’s 2019 MAERS submittal.

Pollutant	Pounds per Year (PPY)	Tons per Year (TPY)
CO	0	0
NOx	0	0
PM10	0	0
PM2.5	0	0
SO2	0	0
VOC	0	0

Compliance History

Mathy Plant 43 is a new facility with no prior violation notices.

Regulatory Analysis

Mathy Plant 43 is subject to PTI No. 52-19 for a portable HMA plant and fugitive emissions. The facility is considered an opt-out source for hazardous air pollutants (HAPs) by taking limits of 9 tpy for a single HAP and 22.5 tpy for total HAPs. The facility is considered a synthetic minor source for NOx and CO, and a true minor source for all other criteria pollutants. The source is subject to 40 CFR Part 60 Subpart I, NSPS for Hot Mix Asphalt Facilities, because the source is defined as a hot mix asphalt facility that commenced construction after June 11, 1973.

Inspection

Mathy Construction Plant 43 is a targeted inspection source for fiscal year 2020. Plant 43 is a new source with a recently issued PTI in September of 2019. To-date, there have been no relocation notices or notification of startup for the plant. On 07/13/2020 an email was sent to Patrick Paulino, Environmental Manger, regarding the status of operation for the portable HMA plant in Michigan. Mr. Paulino responded back on 07/13/2020 stating that the plant has not operated in Michigan, and there are no plans for it to operate in Michigan for 2020. Based on the response from Mr. Paulino, an on-site inspection will not be performed at this time.

Compliance

Based on this inspection, Mathy Construction Plant 43 is in compliance with PTI No. 52-19 and all other applicable air pollution control rules and federal regulations.

NAME Mitchell Uelin DATE 7/29/20 SUPERVISOR _____