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

P127970074		
FACILITY: PAYNE AND DOLAN INC		SRN / ID: P1279
LOCATION: 4080 US HWY 2, IRON RIVER		DISTRICT: Marquette
CITY: IRON RIVER		COUNTY: IRON
CONTACT: James Mertes, Environmental Manager		ACTIVITY DATE: 11/17/2023
STAFF: Lauren Luce	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Targeted Inspection FY24		
RESOLVED COMPLAINTS:		

Facility: Payne & Dolan Inc. C41 (SRN: P1279)

Contact(s): James Mertes, Environmental Manager

Regulatory Authority

D407070074

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

Payne & Dolan, Inc. (P&D) is an asphalt material producer and pavement contractor based out of Waukesha, WI. P&D is one of several companies that make up the Walbec Group, which is a collection of companies that provides construction and engineering services. The company owns and operates several portable and stationary asphalt plants in Wisconsin and Michigan, primarily producing hot mix asphalt (HMA). Plant C41 is a portable drum mixed HMA plant with a rated capacity of 500 ton/hr.

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. The quantities of the type and size of aggregate are determined from the control room. The virgin aggregate is heated by a natural gas-fired burner to remove moisture. Once the virgin aggregate reaches a certain length of the dryer, RAP is dispensed from a separate bin and added to the dryer. The RAP and aggregate continue to be heated and are then mixed with asphalt cement prior to exiting the dryer. After exiting the dryer, HMA is conveyed to storage silos where it is loaded into trucks to be hauled off-site.

Emissions

The primary source of emissions from the plant is the dryer. Air contaminants emitted include PM from aggregate drying and gaseous pollutants from the combustion process of the dryer. The gaseous pollutants consist of sulfur dioxide (SO₂), nitrogen oxides (NOx), 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

P&D C41 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). This facility received a PTI in May 2023, so it has not yet reported to MAERS.

Compliance History

The facility has not received any violation notices in the past five years.

Regulatory Analysis

P&D C41 is subject to PTI No. 71-23. 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

On November 17, 2023, AQD Staff (Lauren Luce) emailed James Mertes, Environmental Manager, at Payne & Dolan to inquire about the status of Plant C41. Staff was informed that the plant has operated in Wisconsin but has not yet operated in Michigan. There are currently no plans to operate the plant in Michigan.

Compliance

Based on this inspection, Payne & Dolan C41 appears to be in compliance with PTI No. 71-23 and all other applicable air pollution control rules and federal regulations.

NAME

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DATE 12-11-2023