

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

N287763730

FACILITY: PAYNE & DOLAN INC C19		SRN / ID: N2877
LOCATION: 19320 E KISKILA ROAD HANCOCK #250-91B, HANCOCK TWP		DISTRICT: Marquette
CITY: HANCOCK TWP		COUNTY: HOUGHTON
CONTACT: JAMES MERTES , ENVIRONMENTAL MANAGER		ACTIVITY DATE: 07/15/2022
STAFF: Lauren Luce	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Targeted Inspection FY22		
RESOLVED COMPLAINTS:		

Facility: Payne & Dolan Inc. C19 (SRN: N2877)

Location: 19320 E Kiskila Rd, Hancock, MI 49930

Contact(s): James Mertes, Environmental Manager

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

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 C19 is a stationary HMA plant located in Hancock, Houghton County, MI. The plant is located in a rural area north of the City of Hancock. The plant operates under Permit to Install (PTI) No. 250-91B. The HMA plant consists of aggregate and reclaimed asphalt pavement (RAP) storage piles, cold feed bins, conveyors, screens, drum dryer, fabric filter, asphalt cement storage tanks, 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. 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 all three types of plants 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 (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

P&D C19 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 2021, the plant reported producing 62,818 tons of asphalt. The table below shows the facility’s 2021 MAERS submittal.

Pollutant	Pounds per Year (PPY)	Tons per Year (TPY)
CO	8166.34	4.08
NO _x	1633.27	<1
PM ₁₀	1429.11	<1
PM _{2.5}	942.27	<1
SO ₂	213.58	<1
VOC	2010.18	1

Compliance History

The facility has not received any violation notices in the past five years. The facility was last inspected in 2018 and was found to be in compliance with all applicable air quality rules and federal regulations at that time.

Regulatory Analysis

P&D C19 is subject to PTI No. 250-91B. The facility is considered a true minor source for criteria pollutants and a synthetic minor source for hazardous air pollutants (HAPs). The source took emission limits to restrict its potential-to-emit (PTE) to below major source thresholds of 10 tpy for individual HAPS and 25 tpy for combined HAPS. 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 July 15, 2022, AQD Staff (Lauren Luce) conducted a targeted inspection of the Payne & Dolan C19 in Hancock, MI. Weather conditions at the time were clear with winds at 6mph out of the NW and temperatures of 78 degrees Fahrenheit. Upon arrival, observations of the plant and yard were taken to inspect for fugitive emissions and opacity limits. No visible emissions were detected, and the plant roadways were well saturated. While the plant was not operating upon arrival, a visible inspection was completed from the gate to check for necessary installations and condition of air pollution control equipment. The baghouse was installed and connected to the drum dryer. The baghouse appeared to be in good condition with no holes or gaps in the structure. The main exhaust duct from the dryer to the baghouse also appeared to be in good condition with no gaps in the structure. The plant appears to be in compliance with Special Conditions (SC) 14, 17, 18, 20.

Records were requested to ensure compliance with PTI No. 250-91B. The plant operated for 291.4 hours in 2021 (SC 21). The plant continues to operate solely on natural gas and has not operated on fuel oil for a number of years. SC 16, 22, 23, 24 and 25 are not applicable given the plants current configuration for fuel use.

Compliance

Based on the site inspection and records reviewed, Payne & Dolan C19 appears to be in compliance with PTI No. 250-91B.



Image (1): Plant roadways



Image (2): Baghouse and stack

NAME *Sam Sam*

DATE 7-22-2022

SUPERVISOR *Michael Kaplan*