

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

N332573018

FACILITY: PAYNE & DOLAN INC C27		SRN / ID: N3325
LOCATION: C27 PORTABLE ASPHALT PLANT #318-99A, GLADSTONE		DISTRICT: Marquette
CITY: GLADSTONE		COUNTY: DELTA
CONTACT: JAMES MERTES , ENVIRONMENTAL MANAGER		ACTIVITY DATE: 08/01/2024
STAFF: Michael Conklin	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Targeted inspection for FY 24.		
RESOLVED COMPLAINTS:		

Facility: Payne & Dolan Inc. C27 (SRN: N3325)

Location: PO Box 781, N3W23650 Badinger Rd, Waukesha, WI 53187

Contact: James Mertes, Environmental Manager, 262-524-1849

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 C27 is a portable drum mixer HMA plant with a rated capacity of 350 ton/hr operating under Permit to Install (PTI) No. 318-99D. For 2024, the plant has not operated in Michigan and is currently in Wisconsin.

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 recycled used oil (RUO)-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

HMA is produced by the drying and mixing of aggregate, recycled asphalt pavement (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 primary source of emissions from all three types of plants is the dryer. Air contaminants emitted include PM from aggregate and gaseous pollutants, consisting of sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC), from the combustion process of the dryer. A fabric filter collector is primarily used as 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 C27 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. For 2023, the plant reported no operations in Michigan.

Compliance History

The source was last inspected in July 2019 and found to be in compliance with PTI No. 318-99C.

Regulatory Analysis

P&D C27 is subject to PTI No. 318-99D, issued on November 18, 2021, for a portable HMA plant. The facility is considered a synthetic minor for HAPs because 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 HAP emissions. The facility also took limits to restrict its PTE to 89.9 tpy for each criteria pollutant to stay below major source thresholds of 100 tpy. The source is subject to NSPS, Subpart I, because the source is defined as a hot mix asphalt facility that commenced construction after June 11, 1973.

Inspection

P&D C27 is a targeted inspection source for fiscal year 2024. On July 31, 2024, an email was sent to Zach Leitner (Environmental Coordinator) requesting the operating status and plans for C27. Mr. Leitner responded back stating the plant is currently in Wisconsin and that there are no plans for it to operate in Michigan this year. C27 last operated in Michigan in 2022 at E24291 White Pine Drive in Watersmeet, MI from August 30th to September 9th. Since the plant is not currently operating in Michigan, a records review will be conducted to determine compliance with PTI No. 318-99D during the 2022 operation in Michigan. Records were requested for compliance with SC VI.3, 4, 5, 7, 8, 9, 10, and 13 under EU001 in PTI No. 318-99D.

EU001

The plant operated 9/6/22 through 9/8/22 and 9/12/22 through 9/15/22. During this operating period, the plant produced 8,665.78 tons of HMA and burned 16,494.39 gallons of used oil in the drum dryer burner.

SC VI.3 and 7

A burner tune-up report was provided from 5/2/2022. The burner check was for the start-up of the paving season. The CO concentration before and after the tune-up was 390 ppm and 411ppm. Excess air range before and after was 152% and 158%. During the burner check, the firing rate was 42%, production rate was at 255 tph, and fuel temp was 150 degrees Fahrenheit. The report notes the condition of the burner mechanicals were okay and no repairs were made.

SC VI.4

Baghouse maintenance records were provided that note blacklight inspections were performed on 5/6/22, 7/14/22, and 9/15/22. Four bags were replaced following the inspection on 9/15/22.

SC VI.5

Daily records for this period of operation were provided that note the type of fuel and total amounts burned, percent sulfur in fuel, tons of HMA produced, average percent RAP in mix, and hours of operation. Quantity of RAP used for each calendar month was also provided. From the records reviewed, the average HMA produced per hour stayed under 350 tons and the percent sulfur in the fuel was 0.2%.

SC VI.8

Daily, monthly, and 12-month rolling records of the amount of HMA produced are being kept. During this operating period, the plant produced a total of 8,665.78 tons.

SC VI.9 and 10

A fuel oil supplier shipment and analysis record were provided for a shipment of burner fuel at this operating location. The shipment record has a date of 9/1/22 and 43 tons of used oil was delivered. An oil analysis associated with the shipment was provided with a date of 4/28/22. The lab report notes the same sample ID "Tank 15" as the shipment record. The analysis includes the following parameters: arsenic, cadmium, chromium, lead, ash content, total halogens, sulfur, PCBs, water, and higher heating value. The results of the shipment analysis are within specifications of Table 1 in Appendix C of PTI No. 318-99D.

A sample was sent for independent laboratory analyses on 10/14/22 with the sample being collected on 9/1/22. The results of the analysis are within specifications of Table 1 in Appendix C of PTI No. 318-99D.

SC VI.13

Annual emissions for CO, SO₂, NO_x, VOCs, PM, and lead were reviewed for 2022. The emission rates reviewed were all less than the applicable limits in PTI No. 318-99D.

Compliance

Based on this inspection, Payne & Dolan, Inc. C27 is in compliance with PTI No. 318-99D and all other applicable air pollution control rules and federal regulations.

NAME Michael KaplanDATE 8/21/2024SUPERVISOR Michael Kaplan