

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

B524063754

<b>FACILITY:</b> PAYNE & DOLAN INC C16	<b>SRN / ID:</b> B5240
<b>LOCATION:</b> 8287 N PT. 3 LANE, GLADSTONE	<b>DISTRICT:</b> Marquette
<b>CITY:</b> GLADSTONE	<b>COUNTY:</b> DELTA
<b>CONTACT:</b> JAMES MERTES , ENVIRONMENTAL MANAGER	<b>ACTIVITY DATE:</b> 06/29/2022
<b>STAFF:</b> Michael Conklin	<b>COMPLIANCE STATUS:</b> Compliance
<b>SUBJECT:</b> Targeted inspection for FY 22.	<b>SOURCE CLASS:</b> SM OPT OUT
<b>RESOLVED COMPLAINTS:</b>	

**Facility: Payne & Dolan Inc. C16 (SRN: B5240)**

**Location: 8287 N.3 Ln, Gladstone, MI 49837**

**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 C16 is a stationary parallel-flow drum HMA plant with a rated capacity of 300 ton/hr operating under Permit To Install (PTI) No. 95-75F. 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 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

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 (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), 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 C16 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 Michigan Air Emissions Reporting System (MAERS). For 2021, the plant reported 90,273 tons of HMA production. The table below shows the source-wide emissions reported for 2021.

Pollutant	Tons per Year (TPY)
CO	5.9
NO <sub>x</sub>	1.2
PM10	2.6
PM2.5	<1

SO2	<1
VOC	1.4

### Compliance History

The source was last inspected in October 2016 and found to be in compliance with PTI No. 95-75F.

### Regulatory Analysis

P&D C216 is subject to PTI No. 95-75F, issued on June 26, 1998, for a stationary HMA plant. 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 C16 is a targeted inspection source for fiscal year 2022. The purpose of the inspection is to determine compliance with PTI No. 95-75F. An on-site inspection was performed on 6/29/2022 at the Payne & Dolan pit located off N3 Rd in Gladstone. Weather conditions at the time were clear with calm wind and temperatures of 75 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. The entrance into the pit was paved and swept. The plant was operating upon arrival. AQD staff (Lauren Luce and Michael Conklin) met with Jim Mertes, Environmental Manager.

The inspection began with Mr. Mertes providing a tour of the plant while explaining the process of HMA production. A walk-around inspection of all the plant equipment was performed 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 stack to the baghouse was checked with a Rangefinder to verify the minimum stack height requirement of 32 ft. The stack height measured during the inspection was 34 ft. No excess material was observed around transfer points of the collected material from the baghouse. The collection system appeared to be well sealed. Areas around the feed bins were inspected for excess spillage of aggregate material. No excess spillage was detected and drop distances from the loader appeared to be kept to a minimum and in control.

While the plant was operating, visible emission checks were performed. The fabric filter collector was connected to the drum mixer/dryer and exhausting out the stack. No visible emissions were observed, only steam from aggregate drying. Fugitive dust from loader operations were below 5 percent opacity and drop distances were kept to a minimum into the feed bins. There were no visible fugitive emissions from process equipment as all doors and seals appeared to be maintained and operating properly. Operations data was gathered from the plant operator while on-site. The plant was producing on average 200 ton/hr, the percent RAP in the mix was 20%, and the baghouse pressure drop was reading 3.0 in WC.

P&D C16 is equipped with a pulse jet baghouse for particulate control from the dryer. The pressure drop is continuously monitored and recorded from the control room. During the inspection, the stack height was measured at 34 feet. This height is in compliance with the minimum stack height of 32 ft.

Plant C16 uses recycled used oil (RUO) as fuel in the drum dryer. The RUO specification is not allowed to exceed the maximum concentration of the constituents listed in Special Condition 22. Plant C16 keeps records of delivery receipts and fuel oil analysis certifications. An example record was provided that notes a used oil tank was delivered to the plant on 07/15/2020. The delivery receipt states the tank number (#15) and the amount delivered. A fuel oil analysis certification of the tank was supplied with the delivery. The samples of the tank were taken on 04/27/2020 and analyzed by Summit Environmental Technologies. The results of the analysis show the RUO to be within specification of the parameters outlined in Special Condition 22.

### Compliance

Based on this inspection and records reviewed, Payne & Dolan C16 is in compliance with all conditions of PTI No. 95-75F.







NAME Michael Kaplan

DATE 7-22-2022

SUPERVISOR Michael Kaplan