

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

N629750125

FACILITY: PAYNE & DOLAN INC C25		SRN / ID: N6297
LOCATION: C25 PORTABLE ASPHALT PLANT #218-97C, GLADSTONE		DISTRICT: Upper Peninsula
CITY: GLADSTONE		COUNTY: DELTA
CONTACT: JAMES MERTES , ENVIRONMENTAL MANAGER		ACTIVITY DATE: 07/30/2019
STAFF: Michael Conklin	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Targeted inspection for FY 19		
RESOLVED COMPLAINTS:		

Facility: Payne & Dolan Inc. C25 (SRN: N6297)  
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 C25 is a portable drum mixer HMA plant with a rated capacity of 275 ton/hr operating under Permit To Install (PTI) No. 218-97C. For 2019, the plant has not operated in Michigan and is currently operating in Wisconsin.

#### 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 drying and gaseous pollutants from combustion of dryer fuel, consisting of sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), lead (pb), and volatile organic compounds (VOC). 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 C25 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 2018, the plant reported no operation in Michigan.

#### Compliance History

The source was last inspected in 1999 and found to be in compliance with PTI No. 218-97.

#### Regulatory Analysis

P&D C25 is subject to PTI No. 218-97C, issued on September 25, 2009, 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**

On July 30, 2019, I (Michael Conklin) emailed Mr. Mertes regarding the status of operations on P&D C25. Mr. Mertes responded back stating that the plant is currently operating in Wisconsin. On July 31, 2019, I spoke with Mr. Mertes on the phone regarding potential operations of the plant in Michigan for the rest of the year. Mr. Mertes stated there are no plans of this currently.

The plant last operated in Michigan in 2016 at the Iron River US 2 Aggregate Site in Iron County. A records request was sent to Mr. Mertes to determine compliance with PTI No. 218-97C for 2016 operations. According to records, the plant operated during the months of June through August and produced 34,054 tons of HMA (Special Condition (SC) 8). For each day of operation, the plant stayed below 275 tons per hour of HMA production (SC 9).

SC 12 requires the drum burners to be fine tuned at the beginning of the season or every 500 hours, whichever comes first. A burner check report was provided, dated 7/8/2016, stating that the burner mechanicals were in good condition. The burner was tuned so that the atomization air was raised, and fuel pressure was lowered (SC 12 and 13). At the time of the burner check, the HMA production rate was 265 tons per hour and the concentration of CO emissions was 1534 ppm. Following the burner tune-up, the CO concentration was down to 301 ppm (SC 12).

A baghouse check record, dated June 20, 2016, was also provided stating that two bags were replaced and that the baghouse had undergone a blacklight inspection (SC 13). The daily environmental tracking form contains a checklist of items to inspect and maintain such as fuel pump, door and drum seals, gauge and line checks, baghouse checks, ductwork integrity, and damper operations (SC 13).

Invoices of used oil shipments, for June through July, were provided along with analytical reports. The analytical reports of the used oil specify the result for each content and the detection limit. All reports provided stated that the contents of the used oil were within the limits provided below (SC 20, 21, and 22).

Content	Limit
Arsenic	5.0 ppm by weight
Cadmium	2.0 ppm by weight
Chromium	10.0 ppm by weight
Lead	100.0 ppm by weight
PCBs	1.0 ppm by weight
Total Halogens	4000.0 ppm by weight
Sulfur	1.0 % by weight
Minimum Flash Point	100 degrees F
Maximum Ash Content	1.0 % by weight
Acidity	Minimum pH = 4; maximum pH = 10

Mr. Mertes provided records of an independent laboratory RUO analysis that was performed by Summit Environmental Technologies to verify the information provided by the supplier (Rock Oil Refining, Inc.) analytical reports. According to the chain of custody document, a sample was collected on 6/6/2016 and received by the laboratory on 7/25/2016. The analytical results contained in the report show that all contents of the used oil are within the limits shown in the table above. The records also contain the quality control data.

During each day of operation, the amount of virgin aggregate and RAP in the mix is recorded (SC 25). The environmental tracking form also records the average percent of RAP per ton of HMA produced, the total hours of plant operation, gallons of used oil fired, the BTU content of burner fuel, percent sulfur of fuel, and checks for a specification sheet and if contents are within the limits (SC 26). The average percent of RAP in HMA produced for 2016 operations was 22.74%, and total fuel usage was 66,512 gallons. This shows compliance with the permit limit of 30% (SC 10). The baghouse pressure drop is automatically recorded three times during a 24-hour period. During operation, records indicate that the pressure drop across the baghouse stayed above 3 inches water gauge (SC 16 and 17). Mr. Mertes also provided records of an EPA Method 9 test performed on the baghouse stack on 3/24/2015. No visible emissions were observed during the test.

Emissions of NOx, SO2, and CO were calculated and resulted in 4,171 lbs, 756 lbs, and 6,845 lbs, respectively, for 2016 (SC 17). The emissions rates are well within the limits contained in PTI No. 218-97C. The 2016 Environmental Tracking Form submitted did not provide monthly and total VOC, PM, and lead emissions that is required per SC 27. A follow up email was sent to Mr. Mertes requesting emission calculations for these three pollutants. Emission calculations were provided using emission factors and an HMA production of 34,000 tons, along with a baghouse control efficiency for PM of 99.8%. These emissions resulted in 1,972 pounds for VOC, 292.4 pounds for PM, and 0.068 pounds for lead. These emissions calculations show compliance with SC 5.

Fugitive emission checks are accounted for daily on the environmental tracking form for the plant. A "yes" or "no" checkbox is also provided on the forms for watering and sweeping done on the roadways.

**Compliance**

Based on this inspection, it appears that Payne & Dolan, Inc. C25 is in compliance with PTI No. 218-97C and all applicable Michigan Air Pollution Control Rules and federal regulations.

NAME Arnold Klein DATE 8/29/19 SUPERVISOR EJF