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

N203373097

FACILITY: PPG Industries, Inc.	SRN / ID: N2033					
LOCATION: 1855 Industrial Dr., GRAI	DISTRICT: Grand Rapids					
CITY: GRAND HAVEN		COUNTY: OTTAWA				
CONTACT: Daniel Malcolm, EHS Spe	ACTIVITY DATE: 08/13/2024					
STAFF: Chris Robinson	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR				
SUBJECT: FY '24 inspection to determine compliance status with respect to PTI No. 134-17A and any other applicable air quality rules						
and regulations.						
RESOLVED COMPLAINTS:						

On August 13, 2024, staff Chris Robinson (CR) from Michigan's Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) conducted an onsite inspection at PPG Industries, Inc. (SRN N2033) located at 1855 Industrial Drive, Grand Haven, Michigan. Prior to entry CR surveyed the perimeter of the facility for odors and visible emissions, none were observed. Weather conditions were approximately 68°F, fair sky conditions with north-northeast winds at approximately 7 mph (www.weatherunderground.com).

CR met with Daniel Malcom, EHS Specialist. The purpose of the inspection was relayed, which was to determine this facility's compliance status with respect to applicable state and federal air quality rules and regulations including Permit to Install (PTI) No. 134-17A. Identification was also provided.

PPG manufactures powder coating. Raw materials are mixed together based on customer specifications in one of six mixers (1 @ 4,000 ml, 1 @ 2,000 ml, 2 @ 200 ml, 2 @ 150 ml). The mix is then put into one of four heated plastic extruders. The extruded material is broken up into chunks then ground to a powder. Particulate Matter (PM) emissions from the mixing and grinding operations are controlled by 4 baghouses. The facility has a preventative maintenance plan in place to ensure the baghouses are maintained properly.

The facility uses some solvent (MEK) for cleaning which the facility has claimed exempt from Rule 201 permitting requirements per Rule 290. The company is using one 55-gallon drum per every six (6) months. Assuming worse case of 100% used is being emitted, that would be approximately nine (9) pounds of VOCs per month, which is well under the 1,000 lb. per month limit specified in Rule 290 for uncontrolled processes.

There have been no changes to the emission units listed in the PTI Emission Unit Summary Table. No stacks were measured but appeared to meet the dimension requirements listed in the PTI. The facility has a current Malfunction Abatement Plan (MAP) which was last updated in 2018. A copy was provided. Per discussions, no emission unit is operated without its baghouse functioning properly. If an issue is identified the process is shut down until it can be repaired. Each baghouse is equipped with a differential pressure gauge and the facility records pressure drop readings daily. Records were reviewed which are attached. Safety data sheets are being maintained onsite.

All of the emission units listed in the PTI are covered under Flexible Group FGPCM. FGPCM is subject to a PM emission limit of 0.1 lbs. of PM per 1,000 lbs. of exhaust gases. Compliance with this emission limit is demonstrated by maintaining and operating the baghouses in a satisfactory manner. Based on maintenance records reviewed onsite and observations, PPG appears to be conducting necessary maintenance. However, differential pressure (DP) gauges are being used to determine when bags need to be replaced. The facility's MAP specifies the optimal operating ranges of each baghouse. Based on a review of DP records, there were several instances when baghouses were operated outside of the optimal ranges specified by the facility in their MAP, which is considered a violation of special condition (SC) III.1. These are listed in the table below.

The facility has been informed that they need to update the operating ranges specified in the MAP if they are not accurate.

Per SC IV.1 the facility is required to install an alarm that sounds when the pressure drop readings exceed -50 mbars. Per discussions and observations, no such alarms exist, which is considered to be a violation.

Baghouse ID	Facility Specified Operating Range ("H2O)	Range of Measured DPs ("H2O)	Initial Date DP Exceeded Specified Operating Range	Date DP Back to Within Specified Operating Range	** Duration out of compliance with specified operating range (days)
AAF	1-5	0	7/15/24		47
С	1-5	0	*1/2/24	8/20/24	231
D	1-5	0	7/8/24	8/9/24	32
SB A	2-8	0- 30	1/10/24	7/16/24	188
		30	7/24/24	8/14/24	21
		17-19	8/20/24	8/27/24	7
SB B	2-8	13-15	*1/2/24		242
SB C	1-5	10	4/12/24	4/13/24	1
		10-30	7/15/24		47
SB D	1-5	25-30	*1/2/24	2/26/24	55
		30	7/25/24	8/14/24	20

^{*} Represents the date of the initial record reviewed not the initial exceedance date.

Based on discussions, observations, and a records review, PPG does not appear to be operating in compliance with applicable air quality rules and regulations, specifically with the requirement to install alarms per SC IV.1 and for operating the baghouses with differential pressures outside of the operating ranges specified in the MAP, which is required per SC III.1 of PTI No. 134-17A.

NAME DATE 9/10/2024 SUPERVISOR HH

^{**} Reflects the duration between the first reading taken that was outside of the optimal range and the first reading back in. It does not take into consideration any downtime of the baghouse that took place in between readings.