

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Other

N207973558

FACILITY: Lacks Industries, Inc.		SRN / ID: N2079
LOCATION: 4375 52ND STREET SE, KENTWOOD		DISTRICT: Grand Rapids
CITY: KENTWOOD		COUNTY: KENT
CONTACT: Karen Homrich , Environmental Manager		ACTIVITY DATE: 06/27/2024
STAFF: April Lazzaro	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MEGASITE
SUBJECT: Unannounced, scheduled Partial Compliance Evaluation.		
RESOLVED COMPLAINTS:		

Staff, April Lazzaro arrived at the Lacks Industries, Inc. Paint Central (Paint Central) facility to conduct an unannounced scheduled Partial Compliance Evaluation (PCE). The primary contact on the inspection was Karen Homrich, Environmental Manager. The purpose of the inspection was to verify the compliance status of the Paint Central facility with requirements contained in Permit to Install (PTI) No. 110-18A. No odors or visible emissions were noted upon my arrival at the facility.

FACILITY DESCRIPTION

The Paint Central facility is an automotive painting facility that is permitted for a pretreatment system, exterior plastic parts paint line and solvent reclamation system. This facility is part of the Lacks Industries 52nd Street complex of facilities which include Paint East, Paint West, Paint Central, Barden Assembly and Barden Plater.

Since the Paint Central facility was permitted via Permit to Install (PTI) 110-18A, and the conditions of the PTI do not conflict with the provisions of Renewable Operating Permit (ROP) No. MI-ROP-N2079-2017, the PTI will be incorporated into the ROP during the next renewal. It is however part of the stationary source identified by State Registration Number (SRN) N2079.

Additionally, since the Paint Central facility is subject to the National Emission Standard for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products promulgated in 40 CFR Part 63, Subparts A and PPPP, compliance with the subpart is evaluated as a combination of all three paint facilities.

The Paint Central facility also has boilers that are subject to the National Emission Standard for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters promulgated in 40 CFR Part 63, Subparts A and DDDDD.

The Paint Central facility operates one large conveyORIZED paint line that consists of the following permitted equipment:

The pretreatment system consists of EUSPINELLE, which is a hexavalent chrome etch dip tank and associated rinses. EUSPINELLE is controlled by a composite mesh pad scrubber.

The painting system consists of EUCENTRALPAINT, which is the automotive interior and exterior plastic parts paint line. This line has a prime coat booth equipped with 4 robots, a base coat booth equipped with 10 robots and a clear coat booth equipped with 8 robots. The robots apply the coatings using electrostatic paint applicators.

The water curtain system for control of particulate matter for all booths combined consists of one ~50,000 gallon solids reclamation system.

The site also has an Offline paint booth that consists of one booth and one robot, for which the company has stated is exempt from permitting pursuant to Rule 287(2)(c). This booth was not evaluated during the PTI process as it was not identified in the PTI application.

This facility was originally permitted pursuant to PTI No. 110-18; however, an issue was discovered on EUSPINELLE that led to an emission limit exceedance and the realization that the existing scrubber was not properly sized and needed to be replaced. The installation of a larger scrubber, and associated emissions increase required a permit modification. The permit was modified to include a larger scrubber and associated chrome emissions increase under PTI No. 110-18A. A recent modification to correct a stack height was also issued under PTI 110-18B.

COMPLIANCE EVALUATION

PTI No. 110-18B

The emission units designated as EUSPINELLE, EUCENTRALPAINT and EUSOLRECLAIM have been incorporated into one flexible group identified as FGCENTRALPAINT.

Emission Limits

An emission limit of 29.4 tons per 12-month rolling time period as determined at the end of each month has been established for VOC for FGCENTRALPAINT and is intended to include all VOC emissions from the three emission units identified above. Total VOC emissions reported by the facility are 18.2 tons on a 12-month rolling basis through May 2024.

Total chromium emissions from EUSPINELLE are limited to 1.06E-04 pounds per hour (pph). Compliance with the emission limit is based on stack testing, which was conducted on October 18, 2021. The results of that test indicated compliance with the emission limit.

Process/Operational Restrictions

The permit requires that a minimum of 90.0 percent (%) by weight of all purge solvents used in EUCENTRALPAINT be recovered and reclaimed, recycled or disposed of. These records were requested and received timely. Similar to what was noted during the previous inspection, the data submitted shows that during May 2024, 24,503 gallons of solvent were used and 24,063 gallons were reclaimed, which would equate to a 98% capture of solvents used. However, the calculation used to determine capture efficiency uses total solvent used divided by a number identified as waste and shows on one day in May that 109% of the solvent was reclaimed. Almost all other days the amount of reclaim is over 100%. This is not accurate to reclaim more solvent than is used. Looking at the records, it appears that the formula may be using the incorrect rows to calculate the reclaimed solvent. This evaluation was presented to Lacks who agreed based upon how the data is labeled that something looks inaccurate and indicated that they have set up a meeting with the Paint Central team to review the process. Using different rows in the calculation,

(captured solvent/total solvent used*100) the data indicates compliance with the 90% recovered and reclaimed, recycled or disposed of requirement. A possible consideration for when this permit is rolled into the Renewable Operating Permit, a clarification should be added with regard to the recordkeeping as it relates to the 90.0% reclamation value as it is currently ambiguous.

During the inspection, each paint booth and the paint kitchen was observed. All waste materials were observed in closed containers as required.

The PTI also requires that the permittee shall handle all VOC and / or HAP containing materials in a manner to minimize the generation of fugitive emissions. This facility uses a paint distribution system whereby paint is mixed in the paint kitchen and sent to the appropriate robot through a sealed hose. However, the general atmosphere surrounding the paint booths has a strong odor of paint. These booths are considered Permanent Total Enclosures (PTE) which will be addressed further below. A facility where PTE's are installed should not smell strongly of paint odors.

Lacks has implemented a malfunction abatement plan for both EUCENTRALPAINT and EUSPINELLE.

The permittee is required to maintain either a minimum of 0.007 inches of water pressure differential between the PTE and the adjacent area on a continuous basis or maintain a facial velocity of 200 feet per minute through each natural draft opening of the PTE on a continuous basis. Lacks has chosen to monitor the pressure differential between each paint booth and the surrounding area. Lacks software engineers have set up the continuous monitoring system to record a pressure drop as a 3 minute average in a 15 minute sample. They have also added a shutdown alarm so that the line will shut down at a pressure just above 0.007" of water pressure differential. Records for periods in 2023 and 2024 were requested. The 2024 data was provided, however Lacks learned that there are issues with the retrieval of the 2023 data. On September 13, 2024, they were able to provide readings with a date/time stamp, but no additional information such as whether production was occurring, or whether follow up was conducted on the readings that do not meet the minimum requirement. As such, this is a violation of PTI No. 110-18B, EUCENTRALPAINT, Special Condition No. VI.5 for failure to monitor and record, in a satisfactory manner, the air flow or pressure differential between the PTE. A Violation Notice will be issued.

The temperature of the Regenerative Thermal Oxidizer was above the minimum required temperature of 1,400°F at the time of the inspection as required. The observed temperature during the inspection was 1,527°F. The thermocouple was scheduled for inspection by Control Solutions, Inc. on July 13, 2024, which was provided in the records request.

The composite mesh pad scrubber on EUSPINELLE was observed, and pressure drop data recorded during the inspection. No obvious leaks or defects of the unit were observed. The overall pressure drop was 2.4" H₂O, Stage 1 was 0.25" H₂O, Stage 2 was 0.60" H₂O, Stage 3 was 1.1" H₂O and the HEPA was 0.4" H₂O. The overall pressure drop reading is within the range established in the O&M Plan. 2023 and 2024 quarterly scrubber inspection records were requested and reviewed. These did not identify any problems, and all error identification systems were operational.

Lacks uses the CEDRI reporting system as necessary for the various EPA required reporting, and also sends the hard copy to the AQD as required.

Lacks appeared to be in compliance with NESHAP PPPP and DDDDD at the time of the inspection.

The facility roof was accessed, and no obvious issues were noted at the time of the inspection.

SUMMARY

Final data to determine compliance was received on September 13, 2024. Lacks Enterprises, Inc., Paint Central Facility was in non-compliance at the time of the inspection.

NAME April Lazzaro DATE 09/16/2024 SUPERVISOR HH