

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

N207959446

<b>FACILITY:</b> Lacks Industries, Inc.		<b>SRN / ID:</b> N2079
<b>LOCATION:</b> 4375 52ND STREET SE, KENTWOOD		<b>DISTRICT:</b> Grand Rapids
<b>CITY:</b> KENTWOOD		<b>COUNTY:</b> KENT
<b>CONTACT:</b> Karen Baweja , Environmental Manager		<b>ACTIVITY DATE:</b> 07/01/2021
<b>STAFF:</b> April Lazzaro	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> MEGASITE
<b>SUBJECT:</b> Unannounced, Partial Compliance Inspection - Paint Central Facility.		
<b>RESOLVED COMPLAINTS:</b>		

Staff, April Lazzaro arrived at the Lacks Industries, Inc. Paint Central (Paint Central) facility to observe stack testing and to conduct an announced scheduled Partial Compliance Evaluation (PCE). I met with Karen Baweja, Environmental Manager, and Eric Hamilton, Maintenance Supervisor. We were joined by Lindsey Wells of the Air Quality Division's Technical Programs Unit who was present to observe the stack testing methodology.

**FACILITY DESCRIPTION**

The Paint Central facility is a automotive painting facility that is permitted for a pretreatment system, interior and exterior plastic parts paint system and solvent reclamation system. The solvent reclamation system has not been installed at the time of this PCE. This facility is part of the Lacks Industries 52<sup>nd</sup> Street complex of facilities.

These facilities include :

- Paint East
- Paint West
- Paint Central
- 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 not be incorporated into the ROP until 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.

## **COMPLIANCE EVALUATION**

On April 20, 2021 a stack test on the EUCENTRALPAINT Regenerative Thermal Oxidizer (RTO) was observed, and it was discovered that the unit was not properly operating. The destruction efficiency was ~93%, which indicated non-compliance with the permit requirement of 95%. A Violation Notice was issued for non-compliance with the requirements of PTI No. 110-18A and Rule 910.

A follow up test was scheduled for July 1, 2021 and this inspection was concurrent with that follow up test. Preliminary data from the July 1, 2021 stack testing indicates compliance with the 95% destruction efficiency requirement.

### **PTI No. 110-18A**

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 9.2 tons on a 12-month rolling basis through May 2021. Since the PTI specifically states that all equipment listed in the permit is to be included in the total VOC emissions reported, clarification on reported emissions was requested. Lacks stated that the value includes all VOC emissions from the facility, other than potentially a small amount from EUSOLRECLAIM, which is not yet operational. It will be added to the total VOC once

installation of the system is completed. The maximum expected emissions from EUSOLRECLAIM are 3.24 tons of VOC according to the permit application.

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 to be conducted by June 29, 2021. The stack testing has not been conducted because the new scrubber had not been installed by that date. Lacks has stated that the reason is due to manufacturing delays as a result of COVID, specifically extended material lead times, component shortages and contractors being scheduled way out as the play catch up on a surplus of jobs coming out of shutdowns. The installation of the new scrubber was completed on August 22, 2021. While Lacks should report the delayed testing as a deviation, it will not be cited as a violation at this time based on the rationale provided by the company and detailed above.

### **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. However, the data submitted shows that from May-December 2020, 100,800 gallons of solvent were used and that 101,512 gallons were reclaimed. Additionally, in May of 2021, Paint Central used 15,500 gallons of solvent but reclaimed 18,713 gallons. Clarification and/or reconciliation of this data was requested from Lacks via email. Lacks responded that they are currently using an outside vendor to recycle the solvent as the EUSOLRECLAIM unit has not yet been installed. Once they complete installation of EUSOLRECLAIM, they will track the 90.0% on a 12-month rolling basis. 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. This was mentioned to Lacks staff during the inspection, and I suggested they work to identify and reduce the source of odors. The source may be the hose and pump connections/fittings for the paint distribution system that is located at the exterior of each of the paint booths.

Lacks has implemented a malfunction abatement plan for both EUCENTRALPAINT and EUSPINELLE. Stack testing of EUSPINELLE is scheduled for the beginning of October 2021, and the pressure drop information will be updated using the appropriate range identified during testing.

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. The continuous monitoring system is taking and displaying the readings through the system portal every second. However, a continuous monitoring system only needs to take a reading once every 15 minutes, and the permit specifies that the data intervals are not to exceed 15 minutes. Some instantaneous readings were out of the required pressure differential range. However, when Lacks staff generated a report that trends the data over time, compliance with the 0.007" was demonstrated. Method 204 is silent with respect to averaging periods for compliance to determine a PTE. Lacks software engineers are setting up their system to record a pressure drop snapshot once every 15 minutes. They are also adding a shutdown alarm so that the line will shut down at a pressure just above 0.007" of water pressure differential. Follow-up discussions were held with Lacks staff, and they will condense the continuous monitoring data into one value per booth, per 15 minute period to demonstrate compliance. This method is acceptable.

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. Observed temperature readings were 1,527°F during the inspection.

The stacks at the facility were not measured during the inspection but will be at a future date to ensure compliance with the permit.

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.

## SUMMARY

Final data to determine compliance was received on August 20, 2021. Lacks Enterprises, Inc., Paint Central Facility appeared to be in compliance at the time of this inspection report.

NAME April Lazzaro

DATE 08/23/2021

SUPERVISOR HH