

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

N559955262

FACILITY: LYONS INDUSTRIES		SRN / ID: N5599
LOCATION: 30000 M-62 WEST, DOWAGIAC		DISTRICT: Kalamazoo
CITY: DOWAGIAC		COUNTY: CASS
CONTACT: Nikki Bisnett , Purchasing Materials Manager		ACTIVITY DATE: 08/19/2020
STAFF: Rachel Benaway	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled inspection of facility for verification of compliance with ROP #MI-ROP-N5599-2017 and all state and federal air regulations, including 40 CFR Part 63 Subpart WWWW and 40 CFR Part 63 Subpart ZZZZ.		
RESOLVED COMPLAINTS:		

Due to Covid-19 health and safety precautions, all AQD inspections are now announced and scheduled prior to entry to a facility. The purpose of this scheduled inspection on 8/19/2020 by AQD staff, Rachel Benaway, was to verify Lyons Industries (N5599) compliance with air use Renewable Operating Permit (ROP) #MI-ROP-N5599-2017 and all state and federal air use regulations. Lyons Industries, a tub and shower wall fiberglass lay-up operation, is a major source of organic HAPS, PM, and VOCs. The facility is subject to 40 CFR 63 Subpart ZZZZ for the stationary emergency engine and 40 CFR 63 Subpart WWWW for reinforced plastic composites production. Nikki Bisnett is the Purchasing/Materials Manager and the contact for the facility.

Permitted equipment at the facility consists of 2 booths for gel coat or fiberglass lay-up operations (EUACRBOOTH1 and 2), various grinders, floor sweeps, saws, outdoor dust collector (EUDUSTCOLLECTOR), and a diesel-fired compression ignition emergency generator (EUGENERATOR).

There were no visible emissions observed outside of the facility and only a very slight to faint Styrene odor detected near the building, within the limits of the parking lot. The facility is operating 5 days a week, 2 shifts per day and has approximately 130 employees. The facility has no parts washers or boilers and reports that no major modifications, removals, or installations of equipment have occurred since the last inspection on 11/14/2018.

EUDUSTCOLLECTOR

Grinders, floor sweeps, saws
Pollution Control: Outdoor dust collector

ROP #MI-ROP-N5599-2017

SC	CONDITION	COMPLIANT?	Y	N
III.1	Remove collected contaminants as needed to maintain maximum operating efficiency		X	
IV.1	Air-cleaning device shall be installed/maintained/operated		X	
VI.1	Perform daily inspection of dust collector (visual emissions check)		X	
VII.2	Semiannual reporting of monitoring and deviations (by 3/15 and 9/15)		X	
VII.3	Annual certification of compliance (by 3/15)		X	

Although dust and fiberglass remnants can be observed around the inside of the facility, there are housekeeping practices in place to ensure the fugitive dust and debris is confined to the building and regularly maintained. Waste management comes to remove the hopper to the outdoor dust collector and replaces an empty one. The area around the dust collector outside was free of debris. The facility submitted daily dust collector visual inspections sheets demonstrating compliance with SC VI.1. The dust collector registered a differential pressure reading of 30 psi, which is within the typical range of readings.

EUDUSTCOLLECTOR appears to be in compliance at this time.

FGBOOTHSUMMARY

Includes the gel coat spray and fiberglass lay-up operations (EUACRBOOTH1 and EUGELBOOTH)
Pollution control: fabric filters

ROP #MI-ROP-N5599-2017

SC	CONDITION	COMPLIANT?	Y	N
I.1	124.2 lb/hr VOC/hr on monthly basis and 98.5 tpy on a 12MRT basis		X	
I.2	123.9 lb/hr Styrene on monthly basis and 98.2 tpy on 12MRT basis		X	
I.3	40 lb/hr Acetone on monthly basis and 29.75 tpy on 12MRT basis		X	
III.1	Must equip all booths with HVLP spray guns		X	
III.2	Change all dry filters with pressure readings are outside manufacturer specified range or visual capture efficiency inspection concludes inadequate capture efficiency.		X	
III.3	All waste shall be captured/stored in closed containers and disposed of in acceptable manner		X	
VI.1	a. Records of each resin, gel coat, catalyst, purge, and cleanup solvent used b. Composition in weight % of VOC, free styrene, and acetone in each resin, gel coat, catalyst, purge, and cleanup solvent used c. Monthly operating hours d. Monthly and 12MRT usage, in lbs, each resin, gel coat, catalyst, purge, cleanup solvent e. Monthly and 12MRT reclaimed amount, in lbs, of purge and cleanup solvent f. Calculated monthly and 12MRT total mass VOC emissions in lbs or tons g. Calculated monthly and 12MRT total mass styrene emissions in lbs or tons h. Calculated monthly and 12MRT total mass acetone emissions in pounds or tons		X X X X X X X X	
VI.2	Records of daily visual installation and capture efficiency inspections of particulate filters during maximum routine operating conditions		X	
VI.3	Records of daily differential pressure readings across each particulate filter		X	

There was a considerable amount of fiberglass residue within the booth area but maintenance routines keep the debris managed and no debris leaves the building. The filters are changed 2 to 3 times a day and looked clean and installed properly at the time of inspection.

The facility submitted daily spray booth inspection sheets demonstrating compliance with SC VI.2. MSDS were submitted for the **resin**, the **catalyst**, and the **acrastrip**. The resin used has a trade secret ingredient which is a VOC but not a HAP. Facility is still not using acetone (since 2008). So far in 2020, the facility has used from 215,000 to just below 300,000 lbs of resin in a month, between 6,336 to 8,448 lbs of catalyst, and 110 to 220 gallons of Acrastrip. They have logged from 375.85 to 455.55 booth hours.

The resin contains 32% styrene, the catalyst is 34% VOCs, and the VOC content of their proprietary ingredient is 10%.

FGBOOTHSUMMARY appears to be in compliance at this time.

FGNESHAP ZZZZ
ROP #MI-ROP-N5599-2017

SC	CONDITION	COMPLIANT?	Y	N
IX.1	comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines by the initial compliance date		X	

The facility is subject to 40 CFR 63 Subpart ZZZZ for the diesel emergency generator. The facility appears to be in compliance with this NESHAP at this time.

FGNESHAP WWWW
-All reinforced plastic composites production
ROP #MI-ROP-N5599-2017

SC	CONDITION	COMPLIANT?	Y	N
I.1	Organic HAP limit: 88 lb/ton resin		X	
III.2	The permittee shall not operate FGNESHAP WWWW except in compliance with the applicable work practice standards in Table 4 of 40 CFR Part 63 Subpart WWWW			
III.3	The permittee shall keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials. Bulk HAP-		X	

	containing materials storage tanks may be vented as necessary for safety.		
III.4	The permittee shall not use cleaning solvents that contain any HAP except that styrene may be used as a cleaner in closed systems, and organic HAP containing cleaners may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts the resin	X	
VI.1	The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material (i.e. resin, gel coat, catalyst, clean-up solvent, etc.). The data shall consist of information provided by the material manufacturer and must be adequate for determining the HAP content of each material as specified in 40 CFR Part 63, Subpart WWWW, § 63.5797	X	
VI.2	The permittee shall maintain all applicable records as required by 40 CFR Part 63, Subpart WWWW, §63.5915 and §63.5920	X	
VI.3	comply with the recordkeeping requirements as detailed in 40 CFR Part 63 Subpart WWWW, §63.5895 and §63.5900	X	
VI.4	The emission factors from Table 1 to Subpart WWWW of 40 CFR Part 63 shall be used to calculate organic HAP emissions for the purposes of this compliance demonstration. Table 1 is included in Appendix 4.	X	

The facility is subject to this 40 CFR 63 subpart WWWW for their open molding mechanical resin application which includes mechanical application of composite materials. The method of application is HRLV guns with non-mechanical tools used before the curing process. The emission limit established by the NESHAP is 88 lb/ton of resin. The resin contains 32% styrene. Based on the emission factor for this process (listed in Appendix 4 of the ROP), the HAP emissions ($0.107 \times 0.32 \times 2000 = 68.48$ lbs/ton of resin) is below the permitted limit. The facility is tracking their styrene emissions on a monthly and 12-month rolling time period. The facility appears to be in compliance with the NESHAP at this time.

NAME Rachel Seraway

DATE 9/1/2020

SUPERVISOR RIL 10/1/20