

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

N054455222

FACILITY: WARM RAIN CORPORATION		SRN / ID: N0544
LOCATION: 51675 N INDUSTRIAL DRIVE, CALUMET		DISTRICT: Marquette
CITY: CALUMET		COUNTY: HOUGHTON
CONTACT: Brian Lane , Environmental Health & Safety Manager (10/2018)		ACTIVITY DATE: 08/14/2020
STAFF: Joe Scanlan	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Announced inspection to ensure compliance with MI-ROP-N0544-2019		
RESOLVED COMPLAINTS:		

LOCATION: Warm Rain Corporation is located at 51675 N. Industrial Drive, Calumet, Houghton County. The facility is within an industrial park adjacent to the Houghton County Airport.

FACILITY DESCRIPTION: Warm Rain Corporation is a plastic composite company that produces high quality fiberglass tub/shower units using an open molding process. The fiberglass fabrications are built using gelcoat/resin and chopped fiberglass sprayed in booths which are adjacent to one another; each booth exhausting through filters out of the side wall. The bathroom units are made using a 4-layer design:

- Bottom layer - High strength fiberglass
- Inside layer - Resin-impregnated end-cut balsa sub-floor
- Inside layer - High strength fiberglass
- Top layer - Solid color cast sheet acrylic or gel-coat finish

During production the units are manufactured in reverse order, with the top layer being laid first. Molds are first sprayed with a gelcoat consisting of resin and catalyst mixed together to provide a smooth clear or pigmented outer surface. The gelcoat is applied via a pneumatic spray gun which mixes the materials in a non-atomized resin/catalyst stream. From there the mold is moved to the next spray booths for additional layering consisting of fiberglass lay-up using a chop gun. After the fiberglass lay-up, the units dry and are released from the molds. Final steps of production include sanding and packaging.

REGULATORY APPLICABILITY: The facility was originally constructed in 1976 under Air Use Permit number 212-76 and now operates under MI-ROP-N0544-2019. The company is located in Houghton County, which is currently designated by the EPA as attainment/unclassified for all criteria pollutants.

Warm Rain is subject to Title V (40 CFR, Part 70) because the PTE of any single HAP regulated by the CAA is more than 10 tpy and/or the PTE of all HAPs combined is more than 25 tpy. Emissions from the facility consist of fugitive vapors from VOCs (primarily styrene) emitted from the gelcoat/resin fiberglass fabrication process. The production area utilizes cross-flow ventilation through the building, drawing air from one side of the building and out the spray booth dry exhaust filters/vents to the outside atmosphere. The four spray booths are individual emission units labeled EUBOOTH1, EUBOOTH2, EUBOOTH3 and EUBOOTH4.

Acetone is used as a cleanup solvent for gelcoat and fiberglass application parts and tools, however it is not considered a VOC. Tools and parts are placed in uncovered buckets containing acetone until cleaned; waste acetone is recycled using a distillation system. Other cleanup solvents are minor sources of VOCs.

FGMACTWWWW includes FGBOOTHs and EUCLEANUP. FGBOOTHs and EUCLEANUP are subject to the MACT Standards for Reinforced Plastics Composites Production (40 CFR, Part 63, Subpart WWWW), which covers processes including open molding, mixing, cleaning, and

material storage.

VOC emissions from FGBOOTHs are exempt from CAM because VOCs are addressed by 40 CFR, Part 63, Subpart WWWW. Therefore, FGBOOTHs is exempt from CAM requirements for VOCs.

COMPLIANCE: On 9/19/2018 the facility was issued a violation notice for failure to submit their semi-annual report certification. The failure to submit was an unintentional error due to personnel changes and was remedied with help from AQD staff.


During the most recent ROP renewal, AQD staff Michael Conklin completed a thorough regulatory and permit review which resulted in the addition of FGMACTWWWW and EUCLEANUP. FGMACTWWWW was added to clearly specify recordkeeping and reporting requirements to ensure compliance with the MACT. EUCLEANUP was included in the revised ROP to track solvent usage and emissions to be reported in MAERS. The four spray booths were also listed as separate emission units for emission reporting purposes in MAERS.

Facility MAERS submittal for 2019 reported 50.93 tons of VOC emissions.

INSPECTION: I contacted the facility in advance due to ensure compliance with the facility's COVID-19 policy. Mr. Brian Lane met me when I arrived and administered a brief health screening per company protocol. We then went through the production, finishing and packaging areas of the facility. Production was in process at the time of my inspection. The facility has expanded it's footprint by approximately on third, adding additional room for finishing, repairing, and storage.

Mr. Lane provided me access to the records used to maintain the spreadsheets for MACT compliance. Spreadsheets show the actual weighted-average HAP content for each emission unit during the reporting period. Records show 12-month rolling facility-wide HAP emissions are consistently about 65% of the MACT limit.

CONCLUSION: The facility has made good strides to improve recordkeeping and reporting and appears to be meeting the MACT requirements. This facility is in compliance with MI-ROP-N0544-2019.

NAME Joseph Scanlan


DATE 10/12/20

SUPERVISOR 