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

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FACILITY: NEW BOSTON RTM, INC.		SRN / ID: M2973
LOCATION: 19155 SHOOK, NEW BOSTON		DISTRICT: Detroit
CITY: NEW BOSTON		COUNTY: WAYNE
CONTACT:		ACTIVITY DATE: 09/25/2024
STAFF: Jill Zimmerman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY 2024 Inspection		
RESOLVED COMPLAINTS:		

SCHEDULED INVESTIGATION REPORT (PCE for an FCE source)

Date of Investigation: September 25, 2024 **Date of Report:** September 25, 2024 **Source:** New Boston RTM, Inc.

SRN: M2973

Address: 19155 Shook, New Boston, Michigan 48164 Subject: Fiscal Year 2024 Inspection (Off-Site)

Author: Jill Zimmerman and Jeff Korniski, Air Quality Division, Detroit District Office

Facility Background:

New Boston RTM, Inc. operates a custom closed molded fiberglass process known as low-pressure resin transfer molding. The process is a form of reaction injection molding that is used to react and harden a plastic in a closed mold around an existing fiberglass mat to form a fiberglass composite part primarily used, in this case, in the boat manufacturing industry. In the New Boston RTM process a gelcoat is first applied to the side of the mold that will become the exterior in the finalized part to provide it with a superior finish. The application of the gelcoat and the use of cleaning solvents cause the majority of the emissions from this facility, and it is these operations which are covered by Permit to Install (PTI) No. 217-04A, issued 10/1/2007. The process uses and emits styrene and methyl methacrylate, both listed as hazardous air pollutants (HAPs); therefore, PTI 217-04A includes synthetic minor HAP limits to classify the source as synthetic minor for the Title V permitting program and to classify it as an area source not subject to 40 CFR 63, Subpart WWWW for Reinforced Plastics Composites Production.

Summary of Off-Site Inspection and Compliance Status:

As an existing synthetic minor Title V opt-out source, New Boston RTM is scheduled for a full compliance evaluation (FCE) within the 2024 fiscal year; the last FCE was conducted in 2019. Diminished resources owing to temporary staff vacancies resulted in this being assigned as an off-site inspection for this fiscal year. New Boston RTM was considered an appropriate candidate for an off-site inspection because, although an opt-out, emissions have historically been well below 50% of the major source thresholds.

PTI 217-04A divides operations at the plant into EUMAIN, EUTOOLING, EUMISCSOLVENTS, and EUCLEANUP. The permit further combines these four emission units into the flexible group FGFIBERGLASS. FGFACILITY is included to cover all process equipment at the stationary source.

EUMAIN covers the three spray booths in the production area that apply gelcoat to the molds. EUTOOLING covers a spray booth in the tooling area that applies gelcoat for an open mold operation that is used, as needed, to manufacture the molds used in the production area. Special conditions (SC) for EUMAIN and EUTOOLING are similar. Annual volatile organic compound (VOC) emissions from EUMAIN and EUTOOLING are limited to 8.5 tons and 6.4 tons, respectively, and consist entirely of styrene and methyl methacrylate. Maximum styrene and methyl methacrylate contents are specified for the resins and gelcoats used, and the emission factors for styrene and methyl methacrylate are written into the permit as emissions limits in the form of pounds emitted per pounds of material applied. There are no VOC controls required, so emissions are calculated through a mass balance.

EUMISCSOLVENTS covers miscellaneous solvents and materials (e.g. mold release, catalysts, polishes) used at the facility and EUCLEANUP covers miscellaneous solvents used in cleanup activities at the facility. Annual VOC

emissions from EUMISCSOLVENTS and EUCLEANUP are limited to 3.0 tons and 1.0 ton, respectively. EUCLEANUP also contains a 20.0 ton annual limit for acetone (a non-VOC).

FGFIBERGLASS requires that all waste cleanup materials used in the process be captured, stored in closed containers, and disposed of appropriately. FGFACILITY limits facility-wide annual HAP emissions to less than 9.0 tons for each individual HAP and less than 22.5 tons for aggregate HAPs.

The AQD received this facility's annual air emissions report for calendar year 2023 on 2/28/2024. Supplemental information attached to the report contains emissions calculations for each emission unit. Facility-wide VOC emissions are reported at 1.9 tons. VOC emissions for EUMAIN, EUTOOLING, EUMISCSOLVENTS, and EUCLEANUP are calculated at 1.5 tons, 0.1 tons, 0.3 tons, and 0.0 tons, respectively. Acetone emissions from EUCLEANUP are calculated at 7.6 tons. Annual emissions of the HAPs styrene and methyl methacrylate are calculated at 1.1 tons and 0.5 tons. Each of these values is less than the respective VOC and HAP emission limits in the PTI. In addition, the weight percents of styrene and methyl methacrylate listed in the calculations are less than the maximums stipulated in the PTI.

Conclusion:

At the time of the investigation New Boston RTM, Inc. appears to be in compliance with applicable federal and State air regulatory requirements.

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