



DEPARTMENT ORDER

**Delmar Marine, LLC
d/b/a Great Island Boat Yard
Cumberland County
Harpswell, Maine
A-1079-71-B-M**

**Departmental
Findings of Fact and Order
Air Emission License
Minor Revision**

FINDINGS OF FACT

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

Delmar Marine, LLC, d/b/a Great Island Boat Yard (GIBY), was issued Air Emission License A-1079-71-A-N on 08/23/2013 for the operation of emission sources associated with its boat yard.

GIBY has requested a minor revision to their license to adjust the required emissions calculation method in Condition (18) and to remove Conditions (19) and (22) because they are not relevant to the facility's operations..

The equipment addressed in this license amendment is located at 419 Harpswell Island Road in Harpswell, Maine.

B. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

This amendment will not increase emissions of any pollutant. Therefore, this amendment is determined to be a minor revision and has been processed as such.

C. Facility Classification

The facility is licensed as follows:

- As a natural minor source of air emissions, because facility emissions cannot exceed major source thresholds for criteria pollutants under normal operations; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

II. BEST PRACTICAL TREATMENT (BPT)

A. Emissions Calculations [Condition (18)]

Condition (18) of A-1079-71-A-N, which describes the required VOC and HAP calculation methods for the facility, reads as follows:

The mass balance equation shall be defined as follows to determine monthly VOC emissions for the applicable boat manufacturing departments utilizing the data collected from Condition (17) and any other applicable data:

A. Monthly Facility Purchases

B. Quantity Shipped offsite

$$\text{Monthly VOC Emissions} = \sum_{i=1}^n (A \times \text{VOC content}) - (B \times \text{VOC content})$$

$$\text{Monthly HAP Emissions} = \sum_{i=1}^n (A \times \text{HAP content}) - (B \times \text{HAP content})$$

where, i is equal to each material used at the facility during the month and n is equal to the number of materials used at the facility during the month

When calculating VOC emissions from open molding resin and gel coat procedures, the current version of the American Composites Manufacturers Association (AMCA, formerly the CFA) unified emission factors shall be used in the "Monthly VOC Emissions" equation.

Due to the necessary enhancements needed to GIB's current inventory system to track the monthly HAP and VOC data, the facility is allowed up to 6 months upon license issuance to get this tracking system in place.

[06-096 CMR 115, BACT]

GIBY has requested that the condition be clarified to specifically allow for more conservative emissions estimates by providing the option for the facility to assume complete volatilization of styrene and methyl methacrylate from resins and gelcoats.

As written, this condition requires that emissions from resins and gelcoats be estimated using the Unified Emission Factors model which was created to reduce over-calculations of styrene and methyl methacrylate emissions. Because GIBY uses only small amounts of resins and gelcoats, the overcalculation from assuming full volatilization of styrene and methyl methacrylate is insignificant. This change will ease recordkeeping requirements for the facility.

The Department has determined that this change will not increase facility emissions and is considered BPT. The paragraph of Condition (18) referring to the Unified Emission Factors model will be updated as follows:

When calculating VOC emissions from open molding resin and gel coat procedures, the most current version of the American Composites Manufacturers Association (AMCA, formerly the CFA) unified emission factors may be used in the “Monthly VOC Emissions” equation.

This change will provide GIBY with the flexibility to use either calculation method moving forward.

B. Removal of Condition (19)

Condition (19) of A-1079-71-A-N, which requires GIBY to conduct manufacturing and testing trials for pollution prevention technologies, reads as the follows:

GIB shall conduct manufacturing and feasibility test trials of pollution prevention technologies such as low VOC content paints, low styrene resins, and water-based or low vapor pressure cleaning solvents as they become commercially available. GIB shall continue to research and develop closed molding applications to increase its use facility-wide and continue outreach efforts to educate its customers about reducing VOC and HAP emissions from the use of paints and coatings at its facility. This research should be documented annually and made available upon request of the Department. [06-096 CMR 115, BACT]

GIBY has requested that this condition be removed because it is not consistent with processes completed at the facility and is unnecessary for pollution prevention. GIBY does not manufacture any products at the facility, processes and material usages are variable based on the needs of customers of the boat yard, and closed molding technologies are infeasible for boat repair. Additionally, emissions from the facility are below minimum licensing thresholds pursuant to 06-096 C.M.R. ch. 115, and the facility voluntarily elects to maintain its license.

The Department has determined that, due to the variability of the facility’s processes and material requirements and because of GIBY’s already low emissions levels, this condition is not necessary and can be removed.

C. Removal of Condition (22)

Condition (22) of A-1079-71-A-N, which requires the facility to use controlled spraying techniques, reads as follows:

GIB shall use controlled spray techniques, including lowest fluid tip pressure which produces an acceptable spray pattern and operator training, when using mechanical sprayers for the application of paints and/or gelcoats and resins.

GIBY has requested that this condition be removed because it is not consistent with processes completed at the facility and is unnecessary for pollution prevention. Controlled spraying is primarily used for the application of resins and gelcoats. Resins and gelcoats are only used at the facility for small repairs, and for those projects the facility will typically

apply the materials with hand lay-up techniques, which result in less emissions than spraying. Additionally, emissions from the facility are below minimum licensing thresholds pursuant to 06-096 C.M.R. ch. 115, and the facility voluntarily elects to maintain its license.

The Department has determined that, due to the irrelevance of this condition to the facility's processes and material requirements, and because of GIBY's already low emissions levels, this condition is not necessary and can be removed.

D. Annual Emissions

This amendment does not change GIBY's licensed annual emissions.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Amendment A-1079-71-B-M subject to the conditions found in Air Emission License A-1079-71-A-N and the following conditions.

Severability. The invalidity or unenforceability of any provision of this License Amendment or part thereof shall not affect the remainder of the provision or any other provisions. This License Amendment shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

SPECIFIC CONDITIONS

Condition (19) and Condition (22) of Air Emission License A-1079-71-A-N are hereby removed.

The Following Condition replaces Condition (18) listed in Air Emission License A-1079-71-A-N.

- (18) The mass balance equation shall be defined as follows to determine monthly VOC emissions for the applicable boat manufacturing departments utilizing the data collected from Condition (17) and any other applicable data:

- A. Monthly Facility Purchases
- B. Quantity Shipped offsite

$$\text{Monthly VOC Emissions} = \sum_{i=1}^n (A \times \text{VOC content}) - (B \times \text{VOC content})$$

$$\text{Monthly HAP Emissions} = \sum_{i=1}^n (A \times \text{HAP content}) - (B \times \text{HAP content})$$

where, i is equal to each material used at the facility during the month and n is equal to the number of materials used at the facility during the month

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When calculating VOC emissions from open molding resin and gel coat procedures, the most current version of the American Composites Manufacturers Association (AMCA, formerly the CFA) unified emission factors may be used in the "Monthly VOC Emissions" equation.

[06-096 CMR 115, BPT]

DONE AND DATED IN AUGUSTA, MAINE THIS 14 DAY OF September, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *Paul Mercer*
PAUL MERCER, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-1079-71-A-N.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 07/23/2018

Date of application acceptance: 07/25/2018

Date filed with the Board of Environmental Protection:

This Order prepared by Colby Fortier-Brown, Bureau of Air Quality.

