

#### STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

#### DEPARTMENT ORDER

FSS, Inc. d/b/a Front Street Shipyard Waldo County Belfast, Maine A-1078-71-B-R Departmental Findings of Fact and Order Air Emission License Renewal

### FINDINGS OF FACT

After review of the air emission license renewal 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

FSS, Inc. d/b/a Front Street Shipyard (FSS) has applied to renew their Air Emission License for the operation of emission sources associated with their boat repair and manufacturing facility.

The equipment addressed in this license is located at 101 Front Street, Belfast, Maine.

#### B. Emission Equipment

The following equipment is addressed in this air emission license:

| Equipment      | Model      | Maximum<br>Flow Rate | Date of<br>Install. | Control Device                 |
|----------------|------------|----------------------|---------------------|--------------------------------|
| Spray Gun #1   | Binks 2100 | 22.2 CFM             | 2011                | Overspray/<br>Arrestor Filters |
| Spray Gun #2   | Binks 2100 | 22.2 CFM             | 2011                | Overspray/<br>Arrestor Filters |
| Spray Gun #3   | Binks 2100 | 22.2 CFM             | 2011                | Overspray/<br>Arrestor Filters |
| Gelcoat Gun #1 | Binks 2100 | 22.2 CFM             | 2011                | Overspray/<br>Arrestor Filters |

#### **Process Equipment**

FSS also has several small boilers, water heaters, and unit heaters that are considered insignificant emissions units because they are each rated below 1.0 MMBtu/hr, the heat input capacity level at or above which would require their inclusion in the license; therefore, these small boilers, water heaters, and unit heaters are not addressed further in this license.

#### **Parts Washers**

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| Equipment       | Capacity  | <b>Cleaning Solution</b> | VOC Content |
|-----------------|-----------|--------------------------|-------------|
| Parts Washer #1 | 5 gallons | Oilzum Parts<br>Cleaner  | 100%        |
| Parts Washer #2 | 5 gallons | Oilzum Parts<br>Cleaner  | 100%        |

### C. Application Classification

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

The application for FSS does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of currently licensed emission units only and has been processed through *Major* and *Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

### D. Facility Classification

With the VOC limits associated with the fiberglass application and coating operations, the facility is licensed as follows:

- As a synthetic minor source of air emissions for criteria pollutants, because FSS is subject to license restrictions that keep facility emissions below major source thresholds for VOC; 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. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

### B. Process Activities

FSS performs the following process activities at their facility:

• Fiberglass repair and manufacturing of boat hulls and associated components. Methods for laying of fiberglass include open molding of fiberglass components as well as vacuum infusion of larger products.

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- Painting and surface coating of boat hulls and associated components. Painting and surface coating of materials takes place inside the facility with the emissions of particulate matter being captured with fabric filters. VOC and HAP emissions from this process are considered to be 100% volatilized for licensing purposes.
- Grinding, sanding, and buffing of boat hulls and associated components are done in preparation for the painting operations above. Particulate matter emissions from these activities are controlled with fabric filters.
- 1. BPT Findings

FSS was issued Air Emission License A-1078-71-A-N on October 18, 2012, which incorporated requirements of Best Available Control Technology (BACT) for the boatyard activities. The VOC, HAP, and Particulate Matter BACT findings in Air Emission License A-1078-71-A-N have been incorporated as a BPT determination into this Air Emission License Renewal. The BPT findings are as follows:

- a. FSS shall maintain good housekeeping practices (close volatile material container lids, proper storage of open containers, etc.) and control emissions from the entire existing and future process activities to less than 24.9 tons/year of VOC emissions, 9.9 tons/year of any single HAP, and 24.9 tons/year of total HAPs.
- b. FSS shall calculate these emissions on a monthly and 12-month rolling total basis, documenting through the use of a mass balance methodology.
- c. To ensure compliance with the annual limit for VOC and HAP, FSS shall record the quantity of resins, gel coats, paints, and solvents used at the facility and the VOC and HAP contents of each, and any other applicable information for each of the following:
  - (1) Monthly VOC and/or HAP containing material purchases for use at the facility; and
  - (2) Quantities of these materials shipped offsite.

| FSS, Inc. d/b/a Front Street Shipyard |   | Departmental               |
|---------------------------------------|---|----------------------------|
| Waldo County                          |   | Findings of Fact and Order |
| Belfast, Maine                        |   | Air Emission License       |
| A-1078-71-B-R                         | 4 | Renewal                    |

d. The following mass balance equations shall be used to calculate monthly VOC and HAP emissions from all applicable activities:

Monthly VOC Emissions = 
$$\sum_{i=1}^{n} ((1) \times \text{VOC content}) - ((2) \times \text{VOC content})$$

Monthly HAP Emissions =  $\sum_{i=1}^{n} ((1) \times HAP \text{ content}) - ((2) \times HAP \text{ content})$ 

where

- i = each material containing VOC and/or HAP used at the facility during the month n = the number of materials used at the facility during the month
- (1) = Monthly VOC and/or HAP containing material purchases for use at the facility
- (2) = Quantity of material shipped offsite
- e. Unified Emission Factors (UEF) for open molding of composites are based on a compilation of research conducted by the Composites Fabricators Association, the National Marine Manufacturing Association, and the United States Environmental Protection Agency. These factors are to be used to determine VOC and HAP emissions from open molding of composites until the Department determines other factors are applicable to calculate VOC emissions.
- f. VOC and HAP emissions from the vacuum infusion method are assumed to be 1% of the amount used, on a mass basis.
- g. FSS shall conduct manufacturing and feasibility test trials of pollution prevention technologies such as low styrene resins and water-based or low vapor pressure cleaning solvents as they become commercially available. FSS shall continue to research and develop closed molding applications to increase its use facility-wide. This research should be documented annually and made available upon request of the Department.
- h. FSS shall continue to use airless spray guns for the application of gelcoats and resins and shall replace standard spray guns with high transfer efficiency units such as airless spray equipment and flow coaters as they wear out.
- i. FSS 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 gelcoats and resins. FSS shall use manual application methods for open-mold resin processes when technologically appropriate.

j. FSS shall control PM emissions from any cutting, buffing, grinding, or sanding processes that vent to the ambient air via vent or duct by using a particulate filter. FSS shall properly maintain all dust collection equipment in the facility and make repairs as necessary to prevent system leakage.

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- k. Particulate matter emissions from exhaust fan filters are considered unquantifiable; therefore, particulate matter emissions shall be limited via a visible emissions limit of 10% opacity on a 6-minute block average basis. FSS shall reduce the potential for fugitive PM emissions from any process conducted outside by limiting such activity to periods of calm winds or through the use of a shroud or wind curtain.
- 2. 06-096 C.M.R. ch. 159, Control of Volatile Organic Compounds from Adhesives and Sealants

Maine rule 06-096 C.M.R. ch. 159 limits emissions of VOC from adhesives, sealants, and primers through two basic components: sale and manufacture restrictions that limit the VOC content of specified adhesives, sealants, and primers sold in the state; and use restrictions that apply primarily to commercial/industrial applications.

FSS is limited in the use of adhesives and sealants with a VOC content not to exceed the values specified in Table 1 of 06-096 C.M.R. ch. 159.

- a. Materials
  - (1) Exemptions
    - (i) Adhesives, sealants, adhesive primers, or sealant primers being tested or evaluated in any research and development, quality assurance, or analytical laboratory, provided records are maintained as required in section 4 of Chapter 159;
    - (ii) Adhesives, sealants, adhesive primers, and sealant primers that are regulated as consumer products under 06-096 C.M.R. Chapter 152 *Control of Volatile Organic Compounds from Consumer Products*;
    - (iii)Adhesives and sealants that contain less than 20 grams of VOC per liter of adhesive or sealant, less water and less exempt compounds, as applied;
    - (iv)Cyanoacrylate adhesives;
    - (v) Adhesives, sealants, adhesive primers, or sealant primers that are sold or supplied by the manufacturer or supplier in containers with a net volume of 16 fluid ounces or less, or a net weight of one pound or less, except plastic cement welding adhesives and contact adhesives;

(vi)Contact adhesives that are sold or supplied by the manufacturer or supplier in containers with a net volume of one gallon or less; and

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- (vii) Adhesives and sealants that are applied in a dry, powdered form and activated without the use of solvent.[06-096 C.M.R. ch. 159 (3)(A)]
- (2) The VOC content limits in Table 1 for adhesives applied to particular substrates shall apply as follows:
  - (i) If an operator uses an adhesive or sealant subject to a specific VOC content limit for such adhesive or sealant in Table 1, such specific limit is applicable rather than an adhesive-to-substrate limit; and
  - (ii) If an adhesive is used to bond dissimilar substrates together, the applicable substrate category with the highest VOC content shall be the limit for such use.
  - [06-096 C.M.R. ch. 159 (1)(C)]
- (3) While using a surface preparation or cleanup solvent, FSS shall comply with the following:
  - (i) FSS shall not use materials for surface preparation containing VOC unless the VOC content of the surface preparation solvent is less than 70 grams per liter;
  - (ii) Except as provided below, FSS shall not use materials containing VOC for the removal of adhesives, sealants, or adhesive or sealant primers from surfaces, other than spray application equipment, unless the composite vapor pressure of the solvent used is less than 45 mm Hg at 20 degrees Celsius; and
  - (iii)Removal of an adhesive, sealant, adhesive primer, or sealant primer from the parts of spray application equipment shall be performed in accordance with 06-096 C.M.R. ch. 130 *Solvent Cleaners*.
     [06-096 C.M.R. ch. 159 (1)(D)]
- b. Work Practice Standards

While using adhesives, sealants, adhesive primers, sealant primers, surface preparation solvents, or clean-up solvents subject to Chapter 159, FSS shall store or dispose of all absorbent materials, such as cloth or paper, which are moistened with adhesives, sealants, primers, or solvents subject to this rule, in non-absorbent containers that shall be closed except when placing materials in or removing materials from the container. [06-096 C.M.R. ch. 159 (2)(F)]

c. Recordkeeping

FSS shall demonstrate compliance by maintaining records of the following information:

- (1) A list of each adhesive, sealant, adhesive primer, sealant primer, cleanup solvent, and surface preparation solvent in use and in storage;
- (2) A data sheet or material list which provides the material name, manufacturer identification, and material application;
- (3) Catalysts, reducers, or other components used and the mix ratio;

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- (4) The VOC content of each product as supplied;
- (5) The final VOC content or vapor pressure, as applied; and
- (6) The annual volume of each adhesive, sealant, adhesive primer, sealant primer, cleanup solvent, or surface preparation solvent used or purchased.[06-096 C.M.R. ch. 159 (4)]
- d. The above information shall be maintained for 5 years and shall be made available to the Department within 90 days of a request. Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of Ch. 159 shall be streamlined to the more stringent six-year requirement.

[06-096 C.M.R. ch. 159 (4)(C)]

3. 06-096 C.M.R. ch. 162, Control for Fiberglass Boat Manufacturing Materials

FSS is not subject to 06-096 C.M.R. ch. 162. Chapter 162 is applicable to facilities with VOC emissions in excess of 5,400 lbs on a 12-month rolling total basis from the manufacture of fiberglass boat hulls or decks and related parts. FSS records and emissions calculations show that the facility has emissions of VOC under 2,000 lbs. [06-096 C.M.R. ch. 162(1)(B)]

4. 06-096 C.M.R. ch. 129, Surface Coating Facilities

FSS is not subject to 06-096 C.M.R. ch. 129 because the coating of marine vessel exteriors and subassemblies are considered exempt. [06-096 C.M.R. ch. 129(1)(E)(3)]

5. 40 C.F.R. Part 63, Subpart HHHHHH, National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

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FSS is not subject to 40 CFR Part 63, Subpart HHHHHH because none of the surface coating materials used at the facility contain chromium, lead, manganese, nickel, or cadmium, and none of the paint stripping operations contain methylene chloride. [40 C.F.R. § 6311169]

6. 40 C.F.R. Part 63, Subpart VVVV, National Emission Standard for Hazardous Air Pollutants for Boat Manufacturing

FSS is not subject to 40 C.F.R. Part 63, Subpart VVVV because the facility has taken a limit on the emissions of HAP to a level below the major source threshold. [40 C.F.R. § 63.5683(a)]

7. 06-096 C.M.R. ch. 166

FSS is not subject to *Industrial Cleaning Solvents*, 06-096 C.M.R. ch. 166. The activities are considered exempt because the facility is also subject to 06-096 C.M.R. ch. 159 and 06-096 C.M.R. ch. 162. [06-096 C.M.R. ch. 166 (3)(A)(10) and (11)]

C. Parts Washers

Parts Washers #1 and #2 were manufactured and installed prior to 2012, and each has a design capacity of 5 gallons. The parts washers are subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130, and records shall be kept documenting compliance.

Because the parts washers are subject to requirements of 06-096 C.M.R. ch. 130, they are exempt from *Industrial Cleaning Solvents*, 06-096 C.M.R. ch. 166. [06-096 C.M.R. ch. 166 (3)(B)]

D. Fugitive Emissions

FSS shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter.

FSS shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

#### E. General Process Emissions

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis.

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#### F. <u>Annual Emissions</u>

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on the following assumptions:

- A facility-wide VOC limit of 24.9 tpy; and
- A facility-wide limit of 9.9 tpy of any single HAP and 24.9 tpy of total HAP.

This information does not represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

#### Total Licensed Annual Emissions for the Facility Tons/year

(used to calculate the annual license fee)

|                    | PM | <b>PM</b> <sub>10</sub> | PM <sub>2.5</sub> | SO <sub>2</sub> | NO <sub>x</sub> | CO | VOC  |
|--------------------|----|-------------------------|-------------------|-----------------|-----------------|----|------|
| Process Activities |    |                         |                   |                 |                 |    | 24.9 |
| Total TPY          |    |                         |                   |                 |                 |    | 24.9 |

| Pollutant  | Tons/year |
|------------|-----------|
| Single HAP | 9.9       |
| Total HAP  | 24.9      |

# **III.AMBIENT AIR QUALITY ANALYSIS**

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

| 1 |   |
|---|---|
|   | U |

| Pollutant         | Tons/Year |
|-------------------|-----------|
| $PM_{10}$         | 25        |
| PM <sub>2.5</sub> | 15        |
| $SO_2$            | 50        |
| NO <sub>x</sub>   | 50        |
| СО                | 250       |

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

This determination is based on information provided by the applicant regarding licensed emission units. If the Department determines that any parameter (e.g., stack size, configuration, flow rate, emission rates, nearby structures, etc.) deviates from what was included in the application, the Department may require FSS to submit additional information and may require an ambient air quality impact analysis at that time.

#### 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 A-1078-71-B-R subject to the following conditions.

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

# **STANDARD CONDITIONS**

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S. § 347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to beginning actual construction of a modification, unless specifically provided for in Chapter 115. [06-096 C.M.R. ch. 115]

(3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 C.M.R. ch. 115]

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- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 C.M.R. ch. 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 C.M.R. ch. 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 C.M.R. ch. 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 C.M.R. ch. 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 C.M.R. ch. 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department, the licensee shall:

A. Perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:

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- 1. Within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
- 2. Pursuant to any other requirement of this license to perform stack testing.
- B. Install or make provisions to install test ports that meet the criteria of 40 C.F.R. Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
- C. Submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 C.M.R. ch. 115]

- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
  - A. Within thirty (30) days following receipt of the written test report by the Department, or another alternative timeframe approved by the Department, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department; and
  - B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
  - C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
    [06-096 C.M.R. ch. 115]
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or license requirement. [06-096 C.M.R. ch. 115]

(14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 C.M.R. ch. 115]

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- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 C.M.R. ch. 115]
- (16) The licensee shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S. § 605). [06-096 C.M.R. ch. 115]

# **SPECIFIC CONDITIONS**

# (17) **Process Activities**

- A. FSS shall maintain good housekeeping practices (close volatile material container lids, proper storage of open containers, etc.) and control emissions from the entire existing and future process activities to less than: 24.9 tons/year of VOC emissions, 9.9 tons/year of any single HAP and 24.9 tons/year of total HAPs.
- B. FSS shall calculate emissions of VOC and HAP on a monthly and 12-month rolling total basis.
- C. To ensure compliance with the annual limit for VOC and HAP, FSS shall record the quantity of resins, gel coats, paints, and solvents used at the facility and the VOC and HAP content of each, and any other applicable information for each of the following:
  - 1. Monthly VOC and/or HAP containing material purchases for use at the facility; and
  - 2. Quantities of these materials shipped offsite.

D. The following mass balance equation shall be used to calculate monthly VOC and HAP emissions from all applicable activities:

Monthly VOC Emissions = 
$$\sum_{i=1}^{n} ((1) \times \text{VOC content}) - ((2) \times \text{VOC content})$$

Monthly HAP Emissions = 
$$\sum_{i=1}^{n} ((1) \text{ x HAP content}) - ((2) \text{ x HAP content})$$

where

i = each material containing VOC and/or HAP used at the facility during the month n = the number of materials used at the facility during the month

- (1) = Monthly VOC and/or HAP containing material purchases for use at the facility
   (2) = Quantity of material shipped offsite
- E. FSS shall calculate the emissions of VOC and HAP using UEF for open molding of composites.
- F. VOC and HAP emissions for the vacuum infusion method are assumed to be 1% of the amount used, on a mass basis.
- G. FSS shall conduct manufacturing and feasibility test trials of pollution prevention technologies such as low styrene resins and water-based or low vapor pressure cleaning solvents as they become commercially available. FSS shall continue to research and develop closed molding applications to increase its use facility-wide. This research should be documented annually and made available upon request of the Department.
- H. FSS shall continue to use airless spray guns for the application of gelcoats and resins and shall replace standard spray guns with high transfer efficiency units such as airless spray equipment and flow coaters as they wear out.
- I. FSS 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 gelcoats and resins. FSS shall use manual application methods for open-mold resin processes when technologically appropriate.
- J. FSS shall control PM emissions from any cutting, buffing, grinding, or sanding processes that vent to the ambient air via vent or duct by using a particulate filter. FSS shall properly maintain all dust collection equipment in the facility and make repairs as necessary to prevent system leakage.

K. Particulate matter emissions from exhaust fan filters are considered unquantifiable; therefore, particulate matter emissions shall be limited via a visible emissions limit of 10% opacity on a 6-minute block average basis. FSS shall reduce the potential for fugitive PM emissions from any process conducted outside by limiting such activity to periods of calm winds or through the use of a shroud or wind curtain.

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- L. 06-096 C.M.R. ch. 159, Control of Volatile Organic Compounds from Adhesives and Sealants
  - 1. Materials
    - a. Exemptions

FSS is exempt from the VOC requirements of 06-096 C.M.R. ch. 159 for the materials and operations listed in 06-096 C.M.R. ch. 159 (3)(A). [06-096 C.M.R. ch. 159 (3)(A)]

- b. The VOC content limits in Table 1 of 06-096 C.M.R. ch. 159 for adhesives applied to particular substrates shall apply as follows:
  - (1) If an operator uses an adhesive or sealant subject to a specific VOC content limit for such adhesive or sealant in Table 1, such specific limit is applicable rather than an adhesive-to-substrate limit; and
  - (2) If an adhesive is used to bond dissimilar substrates together, the applicable substrate category with the highest VOC content shall be the limit for such use.

[06-096 C.M.R. ch. 159 (1)(C)]

- c. While using a surface preparation or cleanup solvent, FSS shall comply with the following:
  - (1) FSS shall not use materials for surface preparation containing VOC, unless the VOC content of the surface preparation solvent is less than 70 grams per liter;
  - (2) Except as provided below, FSS shall not use materials containing VOC for the removal of adhesives, sealants, or adhesive or sealant primers from surfaces, other than spray application equipment, unless the composite vapor pressure of the solvent used is less than 45 mm Hg at 20 degrees Celsius; and

(3) Removal of an adhesive, sealant, adhesive primer, or sealant primer from the parts of spray application equipment shall be performed in accordance with 06-096 C.M.R. ch. 130, *Solvent Cleaners*.
[06-096 C.M.R. ch. 159 (1)(D)]

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2. Work Practice Standards

While using adhesives, sealants, adhesive primers, sealant primers, surface preparation solvents, or clean-up solvents subject to Chapter 159, FSS shall store or dispose of all absorbent materials, such as cloth or paper, which are moistened with adhesives, sealants, primers, or solvents subject to this rule, in non-absorbent containers that shall be closed except when placing materials in or removing materials from the container.

[06-096 C.M.R. ch. 159 (2)(F)]

3. Recordkeeping

FSS shall demonstrate compliance by maintaining records of the following information:

- (1) A list of each adhesive, sealant, adhesive primer, sealant primer, cleanup solvent, and surface preparation solvent in use and in storage;
- (2) A data sheet or material list which provides the material name, manufacturer identification, and material application;
- (3) Catalysts, reducers, or other components used and the mix ratio;
- (4) The VOC content of each product as supplied;
- (5) The final VOC content or vapor pressure, as applied; and
- (6) The annual volume of each adhesive, sealant, adhesive primer, sealant primer, cleanup solvent, or surface preparation solvent used or purchased. [06-096 C.M.R. ch. 159 (4)]
- (7) The above information shall be maintained for 5 years and shall be made available to the Department within 90 days of a request. Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of Ch. 159 shall be streamlined to the more stringent six-year requirement.

[06-096 C.M.R. ch. 159 (4)(C)]

#### (18) **Parts Washers**

Parts Washers #1 and #2 at FSS are subject to Solvent Cleaners, 06-096 C.M.R. ch. 130.

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- A. FSS shall keep records of the amount of solvent added to each parts washer. [06-096 C.M.R. ch. 115, BPT]
- B. The following are exempt from the requirements of 06-096 C.M.R. ch. 130 [06-096 C.M.R. ch. 130]:
  - 1. Solvent cleaners using less than two liters (68 oz.) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
  - 2. Wipe cleaning; and,
  - 3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.
- C. The following standards apply to cold cleaning machines that are applicable sources under 06-096 C.M.R. ch. 130.
  - 1. FSS shall attach a permanent conspicuous label to each unit summarizing the following operational standards:
    - a. Waste solvent shall be collected and stored in closed containers.
    - b. Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
    - c. Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
    - d. The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
    - e. Sponges, fabric, wood, leather, paper products, and other absorbent materials shall not be cleaned in the parts washer.
    - f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.

- g. Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
- h. Work area fans shall not blow across the opening of the parts washer unit.

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- i. The solvent level shall not exceed the fill line.
- 2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches.
- Each parts washer shall be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent.
   [06-096 C.M.R. ch. 130]

# (19) **Fugitive Emissions**

- A. FSS shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter.
- B. FSS shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

[06-096 C.M.R. ch. 115, BPT]

# (20) General Process Sources

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis.  $[06-096 \text{ C.M.R. ch. } 101, \S 3(B)(4)]$ 

FSS, Inc. d/b/a Front Street Shipyard Waldo County Belfast, Maine A-1078-71-B-R

# Departmental Findings of Fact and Order Air Emission License Renewal

(21) If the Department determines that any parameter value pertaining to construction and operation of the emissions units, including but not limited to stack size, configuration, flow rate, emission rates, nearby structures, etc., deviates from what was submitted in the application or ambient air quality impact analysis for this air emission license, FSS may be required to submit additional information. Upon written request from the Department, FSS shall provide information necessary to demonstrate AAQS will not be exceeded, potentially including submission of an ambient air quality impact analysis or an application to amend this air emission license to resolve any deficiencies and ensure compliance with AAQS. Submission of this information is due within 60 days of the Department's written request unless otherwise stated in the Department's letter. [06-096 C.M.R. ch. 115, § 2(O)]

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Done and dated in Augusta, maine this  $4^{th}$  day of DECEMBER, 2023.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

MELANIE LOYZIM, COMMISSIONER

BY:

The term of this license shall be ten (10) years from the signature date above.

[Note: If a renewal application, determined as complete by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S. § 10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the license renewal application.]

for

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: <u>10/13/22</u> Date of application acceptance: <u>10/14/22</u>

Date filed with the Board of Environmental Protection:

This Order prepared by Chris Ham, Bureau of Air Quality.

# FILED

DEC 04, 2023

State of Maine Board of Environmental Protection