



DEPARTMENT ORDER

**Rockland Marine Corporation
Knox County
Rockland, Maine
A-1126-71-A-N**

**Departmental
Findings of Fact and Order
Air Emission License
New License**

FINDINGS OF FACT

After review of the air emission license 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

Rockland Marine Corporation (RMC) has applied for an Air Emission License for the operation of emission sources associated with their shipyard facility.

The equipment addressed in this license is located at 79 Mechanic Street in Rockland, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Process Equipment

<u>Emission Unit ID</u>	<u>Equipment</u>	<u>Maximum Throughput</u>	<u>Date of Install</u>	<u>Pollution Control Equipment</u>	<u>Stack #</u>
Paint Sprayer 1	Graco Xtreme King Airless Spray System	0.38 gpm	Unknown (< 2003)	None	N/A
Paint Sprayer 2	Graco Xtreme King Airless Spray System	0.38 gpm	Unknown (< 2003)	None	N/A
Paint Sprayer 3	Graco Xtreme X70 Airless Spray System	0.38 gpm	2016	None	N/A

C. Process Equipment Chemical Usage

The volatile organic compounds (VOC) and hazardous air pollutants (HAP) contained in the coatings used at RMC constitute the primary source of their air emissions. Material purchases at RMC were evaluated between the years 2006 and 2016 to identify the maximum amount of air emissions produced in a calendar year. In addition, at the Department's request, RMC evaluated their archived records from 1996 to determine if the VOC and HAP contents of coatings and materials utilized during that timeframe were comparable to the VOC and HAP contents of those currently used. The facility records show that the highest annual volume of materials purchased occurred in calendar year 2015, which resulted in the highest actual emission totals of regulated pollutants.

Process Equipment Materials Usage

Process	Material Used in Process	Actual Material Usage (2015)¹	Total VOC Emitted (2015)²	Total HAP Emitted (2015)²
Marine Coatings Application	Paints, Primers, Antifoulants, Thinner	2,597 gallons	3.8 Tons/Year	1.6 Tons/Year

¹ 2015 usage represents the highest volume of materials purchased at RMC in the last 10 calendar years.

² Total emitted quantities were determined using Safety Data Sheet information and assuming that 100% of the VOC and HAP in the material is emitted to atmosphere.

D. Insignificant Equipment and Activities

1. Boilers and Heaters

RMC operates one boiler and a number of small heaters, each with a maximum heat input capacity of less than 1.0 MMBtu per hour. As such, these units are considered insignificant by definition per *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115, Appendix B and will not be addressed further in the air license.

2. Welding

Fumes from the welding processes used at RMC generate small quantities of HAP but not at levels that exceed the minimum thresholds specified by 06-096 C.M.R. ch. 115, Appendix B, Section C, *Insignificant HAP Thresholds*. As such, the emissions from the welding processes at RMC are considered categorically exempt, and their contributions will not be included in the air license calculations. [06-096 C.M.R. ch. 115, Appendix B, Section A, #34]

E. 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.

A conservative approach was used to calculate the facility's potential to emit, based on the present facility's design capabilities and configuration. The current and historical material usage with the highest VOC and HAP contents were selected for the emission calculations. Very conservatively quantifying potential emissions, no time was allotted for mechanical repairs to be performed, and only the tasks necessary to perform the coating operations for the vessels that were being evaluated were factored into the turn-around times. The following two scenarios were considered:

1. The largest vessels capable of being handled at RMC on each railway, each requiring the highest volume of coatings with the highest VOC and HAP contents within their classification (primer, antifoulant, bottom paint, etc.), in the shortest reasonable amount of times it would take to complete the surface coating operations.
2. The smallest vessels capable of being practically handled at RMC, each requiring the highest volume of coatings with the highest VOC and HAP contents within their classification in the shortest reasonable amount of times it would take to complete the surface coating operations.

The emissions generated during these optimized turn-around times were then projected over 12 months to arrive at an estimated annual potential emission total for each scenario. The reason for taking this approach contends that one of these two scenarios would represent the largest amount of emissions that could possibly be generated at RMC within a given timeframe, and that any other potential production scenario at RMC would result in lower emissions than those determined by this method. The results of this analysis are shown below:

Scenario	Annual VOC Potentially Emitted (Tons/Year)	Annual Total HAP Emitted Potentially (Tons/Year)	Largest Single HAP Potentially Emitted Annually (Tons/Year)
Largest vessel that each railway can handle, with their fastest turnaround times	14.4	11.1	8.7
Smallest vessel that each railway would handle, with their fastest turnaround times	12.5	9.9	7.7

This highly conservative approach and evaluation of the resultant data demonstrate that physical, logistical and operational constraints prevent RMC from being a major source, and that they have never exceeded or even approached the major source emission threshold levels.

A facility is determined to be a major source or not based on if its total licensed annual emissions exceed the “Significant Emission” levels as defined in the Department’s *Definitions Regulation*, 06-096 C.M.R. ch. 100.

Pollutant	Total Licensed Annual Emissions (TPY)	Significant Emission Levels
PM	N/A	100
PM ₁₀	N/A	100
SO ₂	N/A	100
NO _x	N/A	100
CO	N/A	100
CO ₂ e	N/A	100,000
VOC	24.9	50
Single HAP	9.9	10
Total HAP	24.9	25

RMC is classified as an existing minor source that is applying for its first air emission license. The total licensed annual emissions for RMC were established to reflect Best Practical Treatment for this source and to ensure that maximum future annual emissions do not exceed the minimum reporting thresholds for *Emission Statements*, 06-096 Code of Maine Rules (C.M.R.) ch. 137. The Department has processed the application through *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115.

With the VOC limits associated with the painting operations at RMC, the facility is licensed below the major source thresholds for criteria air pollutants (CAP) and is considered a minor source of CAP.

With the HAP limits associated with the painting operations at RMC, the facility is licensed below the major source thresholds for hazardous air pollutants (HAP) and is considered an area source of 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 new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Process Description

RMC operates a structural and mechanical repair shipyard that utilizes three marine railways on which to perform the repairs. Over the last ten years, RMC has performed repairs at a rate of between 35 to 50 vessels per year. A smaller part of RMC's business involves constructing barges, with their annual production varying between zero and three barges per year over the last decade.

Vessels that are brought in to RMC for repair are hauled out of the water by electric railway motors onto one of their three railways. The railway capacities range in size from 150 to 1,110 short tons, with cradles ranging from 110 to 180 feet long.

Prior to hauling a boat up onto a railway and beginning the repairs, RMC must first prepare the railway by blocking up the cradle to receive and support the incoming vessel. Because most boats differ in size, structure and profile from each other, and because the wooden blocks used in the cradles are typically crushed during the launch of a repaired vessel and cannot be reused, custom cradles have to be designed and built by RMC for each vessel it takes in to repair. Conservatively estimated, it takes anywhere from 1 to 3 days to block up a vessel, depending on the size of the vessel and its hull configuration.

Once a vessel is blocked up, the areas that need repair must be cleaned of salts and marine growth before the repairs can begin. This cleaning is necessary to allow for the proper inspection and assessment of the areas to be repaired. It also facilitates the performance of the actual repair work by eliminating potential sources of contamination in the weld affected zones of the repair, and is a necessary step in the surface preparation that is required by coating manufacturers for optimum coating adhesion. Typical cleaning processes used at RMC include manual scraping to remove any marine growth from the surface, and pressure washing. Vessels that are brought in for more extensive repairs or those that were brought in for a larger paint job may require larger scale surface preparation, up to the complete removal of an existing paint system. Jobs of this size and scope could require the construction of containment for sandblasting of the vessel.

Most repairs made to the vessels that are brought in to RMC for repair involve some type of welding operations. Welding processes used in the repair of vessels at RMC can include shielded metal arc welding (SMAW), flux cored arc welding (FCAW), metal inert gas welding (MIG), gas tungsten arc welding (GTAW) and submersible arc welding (SAW).

The vessels that are repaired at RMC will almost always require some degree of surface coating once the structural and mechanical work is complete to prevent corrosion from occurring once the vessel is back in the water. The type and quantity of coating applied to a vessel varies from one job to the next, depending on the scope of contracted work requested by the customer and/or the size and extent of repairs that may have been completed.

C. Process Equipment

1. Airless Spray Guns

RMC uses three airless spray gun systems to apply many of the surface coatings to the vessels they work on. Hand brushes and rollers are also used to apply coatings to locations where the application of sprayed surface coatings is not practical, such as the coating of the superstructure, the application of figures (numbers showing the water draw) and the waterline. The VOC and HAP contained in the surface coatings used at RMC constitute the primary source of their air emissions.

2. Storage Tanks

RMC utilizes one 15,000 gallon storage tank, designated as Tank #1, at this facility to store and dispense distillate fuel. Its size, along with type of fuel it handles, exempts it from State of Maine and federal rules and regulations for air emissions. It is being noted in the air license for purposes of completeness, and will not be addressed further.

D. Evaluation of the Potentially Applicable State and Federal Rules and Regulations for Surface Coating Operations

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

The majority of surface coating operations performed at RMC involve the application of surface coatings to the exterior of vessels that were brought in for repair. Chapter 129 - *Surface Coating Facilities* does not apply to the surface coating of the exterior of completely assembled marine vessels or major marine subassemblies which are exposed to the exterior of the vessel. No other surface coating activities performed at RMC trigger Chapter 129 applicability. Therefore, RMC is exempt from the requirements of this chapter. [06-096 C.M.R. ch. 129 (E)(3)(d) and (e)]

2. Reasonably Achievable Control Technologies for Facilities that Emit Volatile Organic Compounds - 06-096 C.M.R. ch. 134

This rule does not apply as RMC's potential to emit VOC is less than 40 tons per calendar year. [06-096 C.M.R. ch. 134 (1)(A)(1)]

3. Architectural and Industrial Maintenance (AIM) Coatings - 06-096 C.M.R. ch. 151
Coatings applied in shop applications or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings for the purposes of this rule. RMC is exempt from this rule as the coatings they apply are to ships and boats. [06-096 C.M.R. ch. 151 (2)(F)]
4. Control of Volatile Organic Compounds from Adhesives and Sealants, 06-096 C.M.R. ch. 159
Adhesives are occasionally used in the repair of vessels performed at RMC. RMC shall meet the requirements of chapter 159 - *Control of Volatile Organic Compounds from Adhesives and Sealants* when selecting and purchasing adhesives for use at their facility. Adhesives used at RMC shall not exceed the applicable VOC content limits specified in Table 1 of this chapter. Records of materials purchased shall be maintained to document compliance with this chapter. [06-096 C.M.R. ch. 159]
5. 40 .C.F.R. Part 63 Subpart II - National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)
This regulation only applies to major sources of HAP. RMC does not approach the minimum HAP emission threshold used to determine whether a facility is a major HAP source and is therefore exempt from the requirements of this regulation. [§ 63.781(a)]
6. 40 .C.F.R. Part 63 Subpart VVVV - National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)
RMC is exempt from this regulation, as the regulation only applies to major sources of HAP and builders of fiberglass or aluminum recreational boats. [§ 63.5683(a)(1) and (2)]
7. 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
RMC is exempt from this regulation, as they do not perform paint stripping operations using chemical strippers that contain methylene chloride (MeCl); nor do they perform autobody finishing operations that encompass motor vehicle and mobile equipment spray-applied surface coating operations; nor do they use any coatings that contain target HAP identified in this regulation. [§ 63.11169(a) through (c)]

E. BACT Analysis for PM, PM₁₀, PM_{2.5}, SO₂, NO_x, CO and GHG

RMC has no sources of PM, PM₁₀ or PM_{2.5} at their facility that generates or produces emission quantities in excess of thresholds that would require their inclusion in the air emission license. Additionally, RMC has no sources of sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO) or greenhouse gases (GHG) at their facility, either from combustion or from process emissions, which are above thresholds requiring their

inclusion in the air emission license. Their potential to emit these criteria air pollutants is negligible and well below the respective thresholds for minor sources. The Department finds that no BACT analysis is required for these pollutants.

F. BACT Analysis for VOC and HAP from Coating Operations

A BACT analysis was conducted for volatile organic compounds (VOC) and hazardous air pollutants (HAP) contained in the surface coatings used at RMC, which is summarized in the following paragraphs.

Several potential technologies to minimize emissions were considered during the analysis:

- Use of low VOC coatings, solvents and materials
- Closed containers / material handling
- Spray paint booths
- Add-on control systems, including regenerative thermal oxidizers (RTO), bio-filters and wet scrubbers
- Use of High Volume Low Pressure (HVLP) sprayers
- Electrodeposition coating lines

Low VOC Coatings and Solvents - Of the emission control technologies considered, RMC already utilizes low VOC coatings. RMC routinely monitors the market for new products as they become available that could be potentially used at their facility. As coatings, solvents and any other materials which may have lower VOC and/or HAP content than those presently used by RMC are identified, the facility evaluates whether those products can be effectively implemented into their repair plans with the goal of reducing their potential air emissions. RMC will use materials with lower VOC and/or HAP content if they can confirm that such use will not compromise the quality of the final product and that it will meet their customers' requirements. Alternatives for VOC emitting solvents such as citrus-based solutions have also been previously explored. To date, these options have been lacking in effectiveness when compared to the products currently in use and were therefore rejected. However, as new products may emerge, RMC will continue to consider them as they are developed.

Closed Containers / Material Handling - RMC utilizes practices to ensure proper handling and storage techniques when working with materials containing VOC and HAP. Containers used to store or transport the materials are free of cracks, holes and other defects, and are kept closed at all times unless the materials are being transferred into or being removed from them. Equipment used to handle and apply the materials is kept in good repair and routinely checked for leaks.

Of the remaining technologies evaluated, none were deemed technologically feasible for the reasons described below.

Spray Paint Booths - Spray paint booths are not considered a viable option. The vessels that are typically repaired at RMC range in size from 25 feet to 200 feet in length, and their profiles and other dimensions vary widely as well. Coating of the vessels being repaired is predominantly conducted on each of the three railways. The wide range of sizes and shapes of the vessels repaired at RMC makes it impractical to develop enclosures that could accommodate all of the various configurations of vessels. In addition, the sizing of the emission control equipment that would be required in conjunction with the spray paint booths would not be efficient or practical over the vast range of vessels serviced. These factors, combined with the need to be able to support repairs in this manner across all three railways make this option technologically infeasible. While it might be possible to coat small parts that have been removed from the vessel in a spray paint booth prior to reinstalling them, re-coating these parts after their installation would be necessary because of the potential damage incurred to the painted surfaces while being reinstalled.

Add On Capture and Control Systems – For the same reasons as described above for Spray Paint Booths, capture of emissions is not technologically feasible for this facility, precluding the use of any add on or control technologies.

High Volume Low Pressure Sprayers - HVLP sprayers are not technologically feasible as they cannot handle the high solids content of the required coatings, nor can they meet the film thickness specifications required for marine use. The paint transfer efficiencies for the airless spray guns currently utilized are much higher than those achievable with HVLP sprayers. Higher paint transfer efficiencies result in lower VOC and/or HAP emissions per unit of area of surface coated. Additionally, to effectively utilize the HVLP sprayers, thinner would have to be added to the coatings used by RMC to be able to spray them, and then RMC would potentially have to apply 2 to 3 additional coats to the vessel being repaired in order to achieve the paint thicknesses required for the marine vessels. Thinning the coatings would result in higher VOC emissions and defeat the purpose of utilizing the HVLP equipment.

Electrodeposition of Coatings – Electrodeposition of coatings is used in the aerospace industry and requires specially formulated coatings. The specifications for marine craft coatings are not consistent with those of the aerospace industry. The marine coatings used at RMC are not designed to be applied via the electrodeposition process, rendering this option technologically unfeasible.

G. BACT Determination

RMC shall meet the following BACT requirements for VOC and HAP emissions from the facility's coating operations:

1. RMC shall continue to monitor the market for new commercially available products with lower VOC and HAP content than those materials currently in use. RMC will evaluate those products with the potential to effectively replace the products they are using at the time of evaluation. RMC shall also continue to evaluate evolving technologies and equipment advances that have the potential to reduce the VOC and HAP emissions from their facility. RMC shall document these evaluations as they are completed and make them available to the Department upon request. [06-096 C.M.R. ch. 115, BACT]
2. RMC shall maintain good housekeeping practices and proper material handling and storage techniques to limit and control emissions from their operations. Containers used to store or transport VOC and/or HAP-containing materials shall be free of cracks, holes and other defects and shall remain closed with lids or covers securely in place at all times unless the materials are being transferred into or being removed from the containers. [06-096 C.M.R. ch. 115, BACT]
3. RMC shall perform routine visual inspections of the equipment that is used to handle or apply materials that contain VOC and/or HAP. Equipment shall be only used if it is found to be in good repair and capable of containing and controlling the materials. [06-096 C.M.R. ch. 115, BACT]
4. RMC shall establish and follow procedures for using or handling materials containing VOC and/or HAP used to prevent or minimize the potential for uncontrolled spills or leaks. [06-096 C.M.R. ch. 115, BACT]
5. Though not subject to *National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)* 40 C.F.R. Part 63, Subpart II, RMC shall only use coatings meeting the volatile organic hazardous air pollutant (VOHAP) limits in Table 2 of Subpart II, except where exempted by § 63.781(b). [06-096 C.M.R. ch. 115, BACT]
6. Though not subject to 40 C.F.R. Part 63, Subpart II, RMC shall limit the addition of thinner to coatings in accordance with 40 C.F.R. § 63.785. [06-096 C.M.R. ch. 115, BACT]

7. RMC shall calculate and track their VOC and HAP emissions on a monthly basis and a 12-month rolling total basis. The following mass balance equations shall be utilized for each material (coating, paint, adhesive and solvent) used at the facility:

Monthly Emissions

$$VOC = (A \times VOC \text{ content}) + (B \times VOC \text{ content}) - (C \times VOC \text{ content})$$

$$HAP = (A \times HAP \text{ content}) + (B \times HAP \text{ content}) - (C \times HAP \text{ content})$$

Where: A = Facility Client Billings of Materials used for the month
B = Materials used on-site that have not been billed to clients
C = Monthly Quantity of Material Shipped Off Site (Sold / Transferred / Disposed)

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

8. RMC shall limit their annual emissions of VOC to no greater than 24.9 tons per year, total HAP to no greater than 24.9 tons per year, and any single HAP to no greater than 9.9 tons per year, all on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT]
9. RMC shall keep and maintain records on a monthly basis that demonstrate their compliance with these requirements. These records shall include, but not be limited to, safety data sheets (SDS) or other documentation from the manufacturer which identifies names, dates and quantities of all applicable materials containing VOC and/or HAP that are purchased or received at RMC, as well as the VOC and HAP contents by weight for each material. The appropriate coating category and the applicable VOHAP limits for each VOC and HAP containing material brought on site and intended for use at the facility shall also be included in these records. RMC shall use this information to calculate the monthly VOC and HAP emissions by individual product used and for total site wide usage, to be made available to the Department upon request.

H. Parts Washer

RMC has one parts washer at their facility that is designated as Parts Washer #1. Parts Washer #1 has a design capacity of 15 gallons and utilizes a solvent cleaner. The parts washer is subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130, and records shall be kept documenting compliance.

I. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour.

J. General Process Sources

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

K. Total Annual Emissions

RMC shall be restricted to the following total annual emissions.

Total Licensed Annual Emissions for the Facility

Tons/year

(Used to calculate the annual license fee)

Unit	VOC	Single HAP	Total HAP
Surface Coating Operations	24.9	9.9	24.9
Total TPY	24.9	9.9	24.9

L. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans*, 40 C.F.R. Part 52, Subpart A, § 52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 C.M.R. ch. 100, are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO₂e).

The quantity of CO₂e emissions from this facility is less than 100,000 tons per year, based on the following:

- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and *Mandatory Greenhouse Gas Reporting*, 40 C.F.R. Part 98; and
- global warming potentials contained in 40 C.F.R. Part 98.

No additional licensing actions to address GHG emissions are required at this time.

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:

Pollutant	Tons/Year
PM ₁₀	25
SO ₂	50
NO _x	50
CO	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.

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-1126-71-A-N subject to the following conditions.

Severability: 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 commencing 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]
- (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:
 - 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 such test results, 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 Part 70 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]
- (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]

SPECIFIC CONDITIONS

(16) Process Emissions

- A. RMC shall continue to monitor the market for new commercially available products with lower VOC and HAP content than those materials currently in use. RMC will evaluate those products with the potential to effectively replace the products they are using at the time of evaluation. RMC shall also continue to evaluate evolving technologies and equipment advances that have the potential to reduce the VOC and HAP emissions from their facility. RMC shall document these evaluations as they are completed and make them available to the Department upon request. [06-096 C.M.R. ch. 115, BACT]

- B. RMC shall maintain good housekeeping practices and proper material handling and storage techniques to limit and control emissions from their operations. This shall include, but not be limited to:
1. Only using containers that are in good repair and free of cracks, holes or other defects that could result in product leakage.
 2. Ensuring that containers are kept closed with their lids or covers securely in place, unless materials are being transferred into or out of them.
 3. Performing routine visual inspections of the equipment that is used at RMC to handle or apply materials that contain VOC and/or HAP. Equipment shall only be used if it is found to be in good repair and capable of containing and controlling the materials.

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

- C. RMC shall establish and follow procedures for using or handling materials containing VOC and/or HAP used to prevent or minimize the potential for uncontrolled spills or leaks. [06-096 C.M.R. ch. 115, BACT]
- D. RMC shall only use coatings that meet the VOHAP limits in Table 2 of 40 C.F.R. Part 63, Subpart II, except where exempted from this subpart by § 63.781(b). [06-096 C.M.R. ch. 115, BACT]
- E. RMC shall limit the addition of thinner to coatings, consistent with 40 C.F.R. § 63.785. [06-096 C.M.R. ch. 115, BACT]
- F. RMC shall calculate and track their VOC and HAP emissions on a monthly basis and a 12-month rolling total basis. The following mass balance equations shall be utilized for each material (coating, paint, adhesive and solvent) used at the facility:

Monthly Emissions

$$VOC = (A \times VOC \text{ content}) + (B \times VOC \text{ content}) - (C \times VOC \text{ content})$$

$$HAP = (A \times HAP \text{ content}) + (B \times HAP \text{ content}) - (C \times HAP \text{ content})$$

Where: A = Facility Client Billings of Materials used for the month
 B = Materials used on-site that have not been billed to clients
 C = Monthly Quantity of Material Shipped Off Site (Sold / Transferred / Disposed)

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

- G. Total site wide emissions at RMC shall not exceed the following limits on a 12-month rolling total basis:
1. 24.9 tons per year of VOC
 2. 9.9 tons per year of any single HAP
 3. 24.9 tons per year of total HAP

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

H. RMC shall keep and maintain records on a monthly basis that demonstrate their compliance with these requirements. These records shall include, but not be limited to, safety data sheets (SDS) or other documentation from the manufacturer which identifies names, dates and quantities of all applicable materials containing VOC and/or HAP that are purchased or received at RMC, as well as the VOC and HAP contents by weight for each material. The appropriate coating category and the applicable VOHAP limits for each VOC and HAP containing material brought on site and intended for use at the facility shall also be included in these records. RMC shall use this information to calculate the monthly VOC and HAP emissions by individual product used and for total site wide usage, to be made available to the Department upon request.

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

(17) **Parts Washer**

Parts washers at RMC are subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130.

- A. RMC 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. RMC shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 C.M.R. ch. 130]:
 - 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.
 - 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. [06-096 C.M.R. ch. 130]

(18) Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour.
[06-096 C.M.R. ch. 115, BACT]

(19) General Process Sources

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]

Rockland Marine Corporation
Knox County
Rockland, Maine
A-1126-71-A-N

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Departmental
Findings of Fact and Order
Air Emission License
New License

- (20) RMC 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).

DONE AND DATED IN AUGUSTA, MAINE THIS 23 DAY OF August, 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Mark Allen Robert Care for
PAUL MERCER, COMMISSIONER

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.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: February 24, 2017
Date of application acceptance: March 3, 2017

Date filed with the Board of Environmental Protection:

This Order prepared by Patric J. Sherman, Bureau of Air Quality.

