



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



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COMMISSIONER

**Vic Firth Company
Penobscot County
Newport, Maine
A-334-71-E-T/R/M (SM)**

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

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

Vic Firth Company (Vic Firth) has applied to renew their Air Emission License permitting the operation of emission sources associated with their wood products manufacturing facility.

Vic Firth has requested the transfer of Air Emission License A-334-71-D-N from Vic Firth Manufacturing, Inc. to Vic Firth Company through a letter to the Bureau of Air Quality dated February 15, 2013. Air Emission License A-334-71-D-N was issued to Vic Firth Manufacturing, Inc. on December 13, 2007.

Vic Firth has requested an amendment to their license in order to note that the facility's Gourmet Line (salt & pepper mills and rolling pins) is no longer running as of January 1, 2013. Due to the shutdown of this line, there is no longer a need for the spray finish process. Vic Firth has also requested permission to burn the finished wooden drumsticks that failed to pass the facility's quality assurance tests in Boiler #1 in addition to the current fuel.

The equipment addressed in this license is located at 77 High Street, Newport, Maine.

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD, SUITE 6
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04679-2094
(207) 764-0477 FAX: (207) 760-3143

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate</u>	<u>Fuel Type, % sulfur</u>	<u>Install. Date</u>	<u>Stack #</u>
Boiler #1	8.4	0.9 ton/hr	Raw wood and finished wooden drumsticks	1980	1
Boiler #2	2.0	14.3 gal/hr	#2 Fuel oil, 0.5% sulfur	1980	2

Process Equipment

<u>Equipment</u>	<u>Production Rate (parts/hr)</u>	<u>Pollution Control Equipment</u>
Spray Line *	2,400	Paper Filters
Tumble Finishing	7,000	None
Dip Finishing	3,000	None
Drying Oven	190	N/A

* Process removed from operation

Vic Firth has additional insignificant fuel-burning activities which do not need to be listed in the emission equipment table above. The list of insignificant activities can be found in the Chapter 115 license application and in Appendix B of *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended).

This license also includes the operation of two parts washers. The parts washers are cold cleaning machines using the solvent Naptha and having a capacity of 15 and 30 gallons, respectively.

C. Application Classification

The application for Vic Firth does not include the installation of new equipment. The removal of the Gourmet Line and addition of a secondary fuel in Boiler #1 will not increase any licensed emission limits. Licensed nitrogen oxides (NO_x) emissions increased due to updating the emission factor to reflect the most current values, but not because of any operational change at the facility. Therefore, the license is considered to be a minor revision and a renewal in addition to a transfer

and has been processed as such. With the hazardous air pollutant (HAP) emission limits on the process equipment, the facility is licensed below the major source thresholds and is considered a synthetic minor (SM).

II. TRANSFER REQUIREMENTS

A. Title, Right, or Interest

In their application, Vic Firth Company submitted copies of property deeds transferring ownership of the facility from Vic Firth Manufacturing, Inc. to Zildjian Acquisition Corp. and documentation of an amendment to a non-encumbrance agreement for a name change from Zildjian Acquisition Corp. to Vic Firth Company. The parties have provided sufficient evidence of title, right, or interest in the facility to allow the transfer of the facility's licenses.

B. Financial Capacity and Intent

Vic Firth Company states that they possess the financial capacity to operate the facility in compliance with its air emission license.

C. Technical Capacity and Intent

Vic Firth Company's acquisition of the facility is not expected to result in any significant change in the employees that currently operate the equipment, facilities, and conduct other activities. The facility's regulatory history with the Department demonstrates that the environmental personnel are competent in air pollution control. The information submitted in the application provides sufficient evidence that Vic Firth Company has the technical capacity and intent to comply with their air emission license.

D. Full Name and Address

The full name and address of the new owner is:

Vic Firth Company
77 High Street
Newport, ME 04953

E. Certification

Vic Firth Company certifies that there will be no increase in air emissions beyond that provided for in the existing licenses, either in quantity or type.

III. 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 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

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. Boiler #1

Boiler #1 was originally manufactured in 1977 as a natural gas fired boiler with a maximum heat input capacity of 12 MMBtu/hr. In 1980, the boiler was modified to burn wood as the fuel source. The maximum heat input of Boiler #1 while burning wood is 8.4 MMBtu/hr. The boiler fires wood with an average moisture content of 10% as the primary fuel source. Vic Firth also plans to begin burning the rejected finished wooden drumsticks generated on site that do not pass the quality assurance tests. Emissions from the boiler pass through a multi-cyclone separator and exhaust to Stack #1 with an above ground level (AGL) height of 50 feet.

The rejected, finished wooden drumsticks to be burned at the facility are classified as a secondary waste material and is specifically exempt from 06-096 CMR 418, *Beneficial Use of Solid Wastes* because the drumsticks are generated exclusively at the facility and are being burned in their own biomass boiler. [06-096 CMR 418 (2)(G)]

Due to the size of Boiler #1, the unit is not subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

1. BPT Findings

The BPT emission limits for the boiler were based on the following:

PM/PM₁₀ – 0.3 lb/MMBtu based on 06-096 CMR 103
SO₂ – 0.025 lb/MMBtu, AP-42, Table 1.6-2, dated 9/03
NO_x – 0.49 lb/MMBtu, AP-42, Table 1.6-2, dated 9/03
CO – 0.60 lb/MMBtu, AP-42, Table 1.6-2, dated 9/03
VOC – 0.017 lb/MMBtu, AP-42, Table 1.6-3, dated 9/03
Opacity – 06-096 CMR 101

The BPT emission limits for the boiler are the following:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	2.52	2.52	0.21	4.12	5.04	0.14

Visible emissions from the boiler shall not exceed 30% opacity on a 6-minute block average, except for no more than two (2) six (6) minute block averages in a 3-hour period.

2. Periodic Monitoring

Periodic monitoring for the boiler shall include recordkeeping to document fuel use both on a monthly and 12-month rolling total basis. Documentation shall include the amount of finished wooden drumsticks rejected and metered in with the current fuel and the overall total amount of fuel used.

C. Boiler #2

Boiler #2 is rated at 2.0 MMBtu/hr and fires #2 fuel oil with a maximum sulfur content of 0.5% by weight. The boiler is primarily used as a backup when there are steam heat needs during Boiler #1 downtimes. The boiler was installed in 1980 and exhausts through its own stack (Stack #2).

Due to the size of the boiler, it is not subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

1. BPT Findings

The BPT emission limits for the boiler were based on the following:

PM/PM₁₀ – The boiler is not large enough to be regulated by 06-096 CMR 103, *Fuel Burning Equipment Particulate Emission Standard*, however, the PM emission limit of 0.08 lb/MMBtu

when firing #2 fuel oil is determined by the Department to be representative of BPT. [06-096 CMR 115, BPT]

SO₂ – 0.5 lb/MMBtu based on firing ASTM D396 compliant #2 fuel oil (0.5% sulfur)

NO_x – 0.3 lb/MMBtu based on data from similar #2 fired boilers of this size and age

CO – 5 lb/1000 gal, AP-42, Table 1.3-1, dated 5/10

VOC – 0.34 lb/1000 gal, AP-42, Table 1.3-3, dated 5/10

Opacity – 06-096 CMR 101

The BPT emission limits for the boiler are the following:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #2	0.16	0.16	1.01	0.60	0.07	0.01

Visible emissions from the boiler firing #2 fuel oil shall not exceed 20% opacity on a 6-minute block average, except for no more than one (1) six (6) minute block average in a 3-hour period.

Prior to January 1, 2016 or by the date otherwise stated in 38 MRSA §603-A(2)(A)(3), the #2 fuel oil fired in Boiler #2 shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). Per 38 MRSA §603-A(2)(A)(3), beginning January 1, 2016 or on the date specified in the statute, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm), and beginning January 1, 2018 or on the date specified in the statute, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm). The specific dates contained in this paragraph reflect the dates in the statute as of the effective date of this license; however, the statute may be revised.

2. Periodic Monitoring

Periodic monitoring for the boiler shall include recordkeeping to document fuel use both on a monthly and 12-month rolling total basis. Documentation shall include the type of fuel used and the sulfur content of the fuel.

D. 40 CFR Part 63 Subpart JJJJJ

Boilers #1 and #2 are subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ). Boiler #1 is considered an existing biomass boiler and Boiler #2 is considered an existing oil boiler with a heat capacity equal to or less than 5 MMBtu/hr.

For informational purposes, a summary of the currently applicable federal 40 CFR Part 63 Subpart JJJJJ requirements is listed below. At this time, the Maine Department of Environmental Protection has not taken delegation of this area source MACT (Maximum Achievable Control Technology) rule promulgated by EPA, however Vic Firth is still subject to the requirements. Notification forms and additional rule information can be found on the following website: <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.

a. Compliance Dates, Notifications, and Work Practice Requirements

i. Initial Notification of Compliance

An Initial Notification submittal to EPA is due no later than January 20, 2014. [40 CFR Part 63.11225(a)(2)]

ii. Boiler Tune-Up Program

(a) A boiler tune-up program shall be implemented to include the initial tune-up of applicable boilers no later than March 21, 2014. [40 CFR Part 63.11196(a)(1)]

(b) After conducting the initial boiler tune-up, a Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(b)]

(c) The boiler tune-up program, conducted biannually for Boiler #1 and every five (5) years for Boiler #2 to demonstrate continuous compliance, shall be performed as specified below:

1. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; however, the burner must be inspected at least once every 36 months for Boiler #1 and once every 72 months for Boiler #2. [40 CFR Part 63.11223(b)(1) and 40 CFR Part 63.11223(e)]
2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR Part 63.11223(b)(2)]
3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the air-to-fuel control system inspection until the next scheduled shutdown is permitted; however, the inspection shall occur at least once every 36 months for Boiler

- #1 and once every 72 months for Boiler #2. [40 CFR Part 63.11223(b)(1) and 40 CFR Part 63.11223(e)]
4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 63.11223(b)(4)]
 5. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR Part 63.11223(b)(5)]
 6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 CFR Part 63.11223(b)(7)]

(d) The facility shall implement a boiler tune-up program after the initial tune-up and initial compliance report (called a Notification of Compliance Status) has been submitted.

1. Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

Boiler Category	Tune-Up Frequency
New or Existing Oil, Biomass and Coal fired boilers that are not designated as "Boilers with less frequent tune up requirements" listed below	Every 2 years
<i>New and Existing Oil, Biomass, and Coal fired Boilers with less frequent tune up requirements</i>	
Seasonal (see definition §63.11237)	Every 5 years
Limited use (see definition §63.11237)	Every 5 years
Oil Fired boilers with a heat input capacity of <5MMBtu/hr	Every 5 years
Boiler with oxygen trim system which maintains and optimum air-to-fuel ratio that would otherwise be subject to a biennial tune up	Every 5 years

[40 CFR Part 63.11223(a) and Table 2]

2. Each biannual tune-up for Boiler #1 shall be conducted no more than 25 months after the previous tune-up. Each five (5) year tune-up for Boiler #2 shall be conducted no more than 61

months after the previous tune-up. [40 CFR Part 63.11223(b) and 40 CFR Part 63.11223(e)]

3. The tune-up compliance report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the concentration of CO in the effluent stream (ppmv) and oxygen in volume percent, measured at high fire or typical operating load, before and after the boiler tune-up, a description of any corrective actions taken as part of the tune-up of the boiler, and the types and amounts of fuels used over the 12 months prior to the tune-up of the boiler. [40 CFR Part 63.11223(b)(6)] The compliance report shall also include the company name and address; a compliance statement signed by a responsible official certifying truth, accuracy, and completeness; and a description of any deviations and corrective actions. [40 CFR Part 63.11225(b)]

b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63 Subpart JJJJJ including the following [40 CFR Part 63.11225(c)]: copies of notifications and reports with supporting compliance documentation; identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned; documentation of fuel type(s) used monthly by each boiler; the occurrence and duration of each malfunction of the boiler; and actions taken during periods of malfunction to minimize emissions and actions taken to restore the malfunctioning boiler to its usual manner of operation. Records shall be in a form suitable and readily available for expeditious review.

Note: EPA will require submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. However, the system will not be in place until October 2013, so sources may submit the written NOCS to the EPA Administrator. [63.1125(a)(4)(vi)]

E. Process Equipment:

1. Tumblers and Dip Finish

Vic Firth operates a series of tumblers and a dip finish operation to apply coatings to their wood products. VOC emissions are based on the quantity of coating used and the coatings respective material safety data sheets (MSDS) data for percent volatility; and the assumption that all volatile components in

the finish are emitted as VOC vapor. License A-334-71-D-N (dated December 13, 2007) set a license limit of 35 tons/year of VOC emissions from Tumblers #1 and #2, the dip finish process and the spray line process, based on a 12-month rolling total. Since the issuance of License A-334-71-D-N, total VOC emissions in tons/year have decreased due to the facility using alternative coating materials with lower VOC content, as well as the removal of the spray line process in 2013. However, with the extra space available created from the removal of the spray line process, Vic Firth intends to increase its operations for the manufacturing of wooden drumsticks. Therefore, the facility shall remain limited to a maximum of 35 tons/year of VOC emissions from Tumblers #1 and #2 and the dip finish process, based on a 12-month rolling total.

Emissions of HAPs from the process equipment shall be limited to 9.9 tons/year of total HAPs, based on a 12-month rolling total basis.

2. Cleaning Stations/ Parts Washers

Vic Firth also operates several small cleaning stations and two parts washer stations from which very small quantities of VOCs are emitted. The total quantity of VOCs emitted from the cleaning stations is assumed to be less than 1 ton/year, therefore the cleaning stations are considered insignificant activity as defined in 06-096 CMR 114, Appendix B.B.1. Although the emissions from the parts washers are considered insignificant based on the amount of VOCs emitted, they are still subject to the operational standards found in *Solvent Cleaners*, 06-096 CMR 130 and records shall be kept documenting compliance. The parts washers have a design capacity of 15 and 30 gallons and both units use the solvent Naptha.

3. Wood Drying Kilns

Vic Firth operates seven kilns for drying lumber. There has not been enough data gathered on VOC emissions from hardwood species to calculate an exact emission rate from these processes. However, it is the opinion of the Department that if Vic Firth processes lumber through their kilns at maximum capacity they will not exceed 1 ton/year of VOCs, therefore making lumber drying in the kilns an insignificant activity as defined in 06-096 CMR 115, Appendix B.B.1.

4. Drying Oven:

One steam heated drying oven is located on site and used occasionally to dry parts.

F. Record Keeping

As part of BPT for VOCs and HAPs control, Vic Firth shall maintain and make available upon request a current list of all materials in use, including all coatings used in the tumbling and dip finish processes. This list shall provide the necessary data to determine compliance, including the following:

- a) The amount and type of each material used on a monthly basis.
- b) The VOC and HAP contents of each material on a percent by weight basis or pounds per gallon (lbs/gal) basis.

The monthly totals of VOCs and HAPs shall be calculated and tracked by Vic Firth on a 12-month rolling total basis.

G. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour.

H. General Process Emissions

Visible emissions from any general process source shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

I. Annual Emissions

1. Total Annual Emissions

Vic Firth shall be restricted to the following annual emissions, based on a 12-month rolling total. The tons per year limits for Boilers #1 and #2 were calculated based on maximum operation of 8,760 hrs/yr:

Total Licensed Annual Emissions for the Facility

Tons/year

(used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC	Total HAP
Boiler #1	11.0	11.0	0.9	18.0	22.1	0.6	--
Boiler #2	0.7	0.7	4.4	2.6	0.3	0.1	--
Process Emissions	--	--	--	--	--	35.0	9.9
Total TPY	11.7	11.7	5.3	20.6	22.4	35.7	9.9

2. 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 CFR Part 52, Subpart A, §52.21 Prevention of Significant Deterioration of Air Quality rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), 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).

Based on the facility's fuel use limit(s), the worst case emission factors from AP-42, IPCC (Intergovernmental Panel on Climate Change), and *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98, and the global warming potentials contained in 40 CFR Part 98, Vic Firth is below the major source threshold of 100,000 tons of CO₂e per year. Therefore, no additional licensing requirements are needed to address GHG emissions at this time.

IV. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source shall be determined by the Department on a case-by case basis. In accordance with 06-096 CMR 115, an ambient air quality impact analysis is not required for a minor source if the total 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 facility licensed emissions 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.

**Vic Firth Company
Penobscot County
Newport, Maine
A-334-71-E-T/R/M (SM)**

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

ORDER

Based on the above, the Department concludes that the applicant for the air emission license transfer has the capacity to satisfy all applicable statutory criteria and hereby APPROVES the transfer of Air Emission License A-334-71-E-T/R/M, from Vic Firth Manufacturing, Inc. to Vic Firth Company, subject to all conditions attached to them.

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-334-71-E-T/R/M subject to the following conditions.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License 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.A. §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 CMR 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 CMR 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 CMR 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 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 CMR 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 CMR 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 CMR 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 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR 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 CFR 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 CMR 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 CFR 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 CMR 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 CMR 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 CMR 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 CMR 115]

SPECIFIC CONDITIONS

(16) Boiler #1

A. Fuel

1. Boiler #1 shall fire wood with an average of 10% moisture content with a heat content of 7,800 Btu/lb (or equivalent) as the primary fuel source and rejected, finished wooden drumsticks generated on-site as a secondary fuel. [06-096 CMR 115, BACT]
2. The rejected, finished wooden drumsticks shall be metered in with the primary fuel. [06-096 CMR 115, BACT]
3. Vic Firth shall record the amount of rejected, finished wooden drumsticks being burned in the boiler on a monthly and 12-month rolling total basis. [06-096 CMR 115, BPT]
4. Records of total annual fuel use shall be kept on a monthly and 12-month rolling total basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1	PM	0.3	06-096 CMR 103(2)(B)(4)(a)

C. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	2.52	2.52	0.21	4.12	5.04	0.14

- D. Visible emissions from Boiler #1 shall not exceed 30% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

(17) Boiler #2

A. Fuel

1. Boiler #2 shall fire only #2 fuel oil. [06-096 CMR 115, BPT]
2. Prior to January 1, 2016 or by the date otherwise stated in 38 MRSA §603-A(2)(A)(3), the #2 fuel oil fired in the boiler shall be ASTM D396

- compliant (max. sulfur content of 0.5% by weight). [06-096 CMR 115, BPT]
3. Beginning January 1, 2016 or by the date otherwise stated in 38 MRSA §603-A(2)(A)(3), the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm). [38 MRSA §603-A(2)(A)(3)]
 4. Beginning January 1, 2018 or by the date otherwise stated in 38 MRSA §603-A(2)(A)(3), the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]
 5. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur of the fuel delivered. Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #2	0.16	0.16	1.01	0.60	0.07	0.01

- C. Visible emissions from Boiler #2 shall not exceed 20% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period. [06-096 CMR 101]

(18) **Tumblers and Dip Finish**

- A. Visible emissions from the tumble finish equipment and the dip finish equipment shall each not exceed an opacity of 20% on a 6-minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 115, BPT]
- B. Vic Firth shall limit total HAP emissions to 9.9 TPY and VOC emissions to 35.0 TPY (all based on a 12-month rolling total), based on chemical purchases as specified in Condition (18)(C) and calculations and emission factors as determined in accordance with Condition (18)(C). [06-096 CMR 115, BPT]
- C. To ensure compliance with annual emission limits, Vic Firth shall record on a monthly basis, the quantity of raw materials purchased and in stock which contain VOC and HAPs. Vic Firth shall also maintain records of the content on a percent VOC and HAP by weight basis for each material or the pounds VOC and HAP per gallon of each material. Monthly inventory data shall be used to determine the quantity of each material used per month. The

following equations shall be used to calculate VOC and HAP emissions on a monthly and 12-month rolling total basis [06-096 CMR 115, BPT]:

Total VOCs

$$\text{Emissions} = \sum_{i=1}^n \left[\begin{array}{l} \text{Quantity in stock at beginning of the month} \\ - \text{Quantity in stock at the end of the month} \\ + \text{Monthly product purchases} \end{array} \right] \times \text{VOC content}]$$

Where:

n = the number of different coatings in stock at the facility

Total HAPs

$$\text{Emissions} = \sum_{i=1}^n \left[\begin{array}{l} \text{Quantity in stock at beginning of the month} \\ - \text{Quantity in stock at the end of the month} \\ + \text{Monthly product purchases} \end{array} \right] \times \text{HAP content}]$$

Where:

n = the number of different coatings in stock at the facility

(19) **Parts Washer**

Parts washers at Vic Firth are subject to *Solvent Cleaners*, 06-096 CMR 130 (as amended).

- A. Vic Firth shall keep records of the amount of solvent added to each parts washer. [06-096 CMR 115, BPT]
- B. The following are exempt from the requirements of 06-096 CMR 130 [06-096 CMR 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 Chapter 130.
 1. Vic Firth shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 CMR 130]:
 - (i) Waste solvent shall be collected and stored in closed containers.
 - (ii) 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.

- (iii) 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.
 - (iv) The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
 - (v) Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the degreaser.
 - (vi) 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.
 - (vii) Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
 - (viii) Work area fans shall not blow across the opening of the degreaser unit.
 - (ix) 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 CMR 130]

(20) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour. [06-096 CMR 101]

(21) **General Process Sources**

Visible emissions from any general process source shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 101]

(22) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 CMR 137 (as amended), the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of either:

Vic Firth Company
Penobscot County
Newport, Maine
A-334-71-E-T/R/M (SM)

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

- 1) A computer program and accompanying instructions supplied by the Department; or
- 2) A written emission statement containing the information required in 06-096 CMR 137.

The emission statement must be submitted as specified by the date in 06-096 CMR 137.

- (23) Vic Firth 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.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 21 DAY OF March, 2013.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Come for
PATRICIA W. AHO, COMMISSIONER

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

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 12/5/2012

Date of application acceptance: 12/7/2012

Date filed with the Board of Environmental Protection:

This Order prepared by Allison M. Hazard, Bureau of Air Quality.

