

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

#### **DEPARTMENT ORDER**

Valmet, Inc. York County Biddeford, Maine A-851-71-C-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

Valmet, Inc. (Valmet), formerly known as Metso Paper USA Inc, has applied to renew their existing air emissions license permitting the operation of emissions sources associated with their custom paper machinery manufacturing facility.

The equipment addressed in this license is located at 516 Alfred Street, Biddeford, Maine.

#### B. Emission Equipment

The following equipment is addressed in this air emission license:

# **Fuel Burning Equipment**

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gallons/hour)	Fuel Type	Installation Date	Stack #
Boiler #1	1.1	8.0	Distillate fuel, 0.5%S	1988	1
Boiler #2	1.1	8.0	Distillate fuel, 0.5%S	1998	1
Boiler #3	1.4	9.8	Distillate fuel, 0.5%S	1994	2
Boiler #7	2.0	14.2	Distillate fuel, 0.5%S	2011	8
Dryer	1.0	10.6	Propane	1972	4

#### **Process Equipment**

Equipment/Process	Rate	Pollutant Emitted	Control Device(s)	Stack #
Paint Spray Booth #6	Varies	PM, VOC, HAP	Fabric Filters, HVLP guns	5, 6, 7
Welding Anti-Spatter Spray Application	Varies	HAP	None	Fugitive

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#### C. Definitions

<u>Distillate Fuel</u>. For the purposes of this license, distillate fuel means the following:

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- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975:
- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

# D. 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.

The application for Valmet 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.

Because Valmet's maximum annual emissions are below the major source thresholds for all criteria pollutants, Valmet is considered to be a true minor.

Valmet 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 06-096 C.M.R. 100. 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:

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- 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 Description

Valmet engineers and manufactures custom paper machinery, primarily paper drying equipment. The machinery and equipment are manufactured from various metal stock including ductile iron, aluminum, mild carbon steel, and type 304/316 stainless steel. The production operations include metal cutting, machining, metal preparation, welding and spray painting.

#### C. Boiler #1, #2, #3 and #7

Boilers #1, #2, #3 and #7 were manufactured in 1988, 1998, 1994 and 2011 with maximum design capacities of 1.1, 1.1 and 1.4 and 2.0 MMBtu/hr, respectively.

Boilers #1, #2, #3 and #7 each fire distillate fuel.

Boilers #1 and #2 vent through combined stack #1, Boiler 3 vents through stack #2, and Boiler #7 vents through stack #8.

### 1. BPT Findings

The BPT emission limits for Boilers #1, #2, #3 and #7 were based on the following:

PM/PM <sub>10</sub>	2.0 lb/1000 gallons, based on AP-42, Table 1.3-1, dated 5/10
$SO_2$	0.5 lb/MMBtu, firing 0.5% S distillate fuel
$NO_{X}$	0.35 lb/MMBtu, 2011 BPT determination (A-851-71-A-N)
CO	5.0 lb/1000 gallons, AP-42, Table 1.3-1, dated 5/10
VOC	0.34 lb/1000 gallons, AP-42, Table 1.3-3, dated 5/10
Opacity	06-096 C.M.R. ch. 115, BPT

The BPT emission limits for Boilers #1, #2, #3 and #7 are the following:

Equipment	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	0.02	0.02	0.55	0.39	0.04	0.01
Boiler #2	0.02	0.02	0.55	0.39	0.04	0.01
Boiler #3	0.02	0.02	0.70	0.49	0.05	0.01
Boiler #7	0.03	0.03	1.00	0.70	0.07	0.01

Visible emissions from Stacks #1, #2 and #8 shall not exceed 20% opacity on a six-minute block average basis.

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# Fuel Sulfur Content Requirements

Boilers #1, #2, #3 and #7 are licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 38 M.R.S. § 603-A(2)(A)(3), as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm). Therefore, beginning July 1, 2018, the distillate fuel purchased or otherwise obtained for use in Boilers #1, #2, #3 and #7 shall not exceed 0.0015% by weight (15 ppm).

### 2. Periodic Monitoring

Periodic monitoring for Boilers #1, #2, #3 and #7 shall include recordkeeping to document fuel use both on a monthly and calendar-year basis. Documentation shall include the type of fuel used and sulfur content of the fuel.

3. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

Because Boilers #1, #2, #3 and #7 are each less than 10 MMBTU/hr, Boilers #1, #2, #3 and #7 are not subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

4. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart JJJJJJ

Boiler #7 is subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJJ. [40 C.F.R. §§63.11193 and 63.11195] Boilers #1, #2 and #3 are not subject to 40 C.F.R. Part 63, Subpart JJJJJJ, as they are considered hot-water heaters with maximum heat inputs less than 1.6 MMBTU/hr.

A summary of the currently applicable federal 40 C.F.R. Part 63, Subpart JJJJJJ requirements is listed below. At this time, the Department has not taken delegation of this area source MACT (Maximum Achievable Control Technology) rule promulgated by EPA; however, Valmet is still subject to the requirements. Notification forms and additional rule information can be found on the following website: <a href="http://www.epa.gov/ttn/atw/boiler/boilerpg.html">http://www.epa.gov/ttn/atw/boiler/boilerpg.html</a>.

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- a. Compliance Dates, Notifications, and Work Practice Requirements
  - (1) Initial Notification of Compliance

An Initial Notification submittal to EPA was due no later than January 20, 2014. [40 C.F.R. § 63.11225(a)(2)] Since Boiler #7 was manufactured after 2010 and is considered a new boiler, an Initial Notification was not required.

- (2) Boiler Tune-Up Program
  - (i) A boiler tune-up program shall be implemented. [40 C.F.R. § 63.11223]
  - (ii) 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
New and Existing Oil, Biomass, and Coal fired Boilers with less fre	equent tune up requirements
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 an optimum air- to-fuel ratio that would otherwise be subject to a biennial tune up	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

- (iii) The boiler tune-up program, conducted 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, not to exceed 36 months from the previous inspection. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 C.F.R. § 63.11223(b)(1)]
  - 2. Inspect the flame pattern, <u>as applicable</u>, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]

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- 3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 C.F.R. § 63.11223(b)(3)]
- 4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 63.11223(b)(7)]
- (iv) <u>Tune-Up Report</u>: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
  - 1. The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
  - 2. A description of any corrective actions taken as part of the tune-up of the boiler; and
  - 3. The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]
- (v) After conducting the initial boiler tune-up, a Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014. [40 C.F.R. § 63.11225(a)(4) and 40 C.F.R. § 63.11214(b)]

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A Notification of Compliance Status is not needed for Boiler #7, as it is considered a new boiler (manufactured after 2010) and therefore, does not require an initial boiler tune-up.

# (3) Compliance Report

A compliance report shall be prepared by March 1<sup>st</sup> every five years which covers the previous five calendar years. The report shall be maintained by Valmet and submitted to the Department and/or to EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

- (i) Company name and address;
- (ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;
- (iii)A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- (iv) The following certifications, as applicable:
  - 1. "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
  - 2. "No secondary materials that are solid waste were combusted in any affected unit."
  - 3. "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

#### D. Dryer

The propane-fired dryer was manufactured in 1972, has a maximum design capacity of 1.0 MMBTU/hr and vents through Stack #4.

#### 1. BPT Findings

The BPT emission limits for the dryer were based upon the following:

PM/PM <sub>10</sub>	0.2 lb/1000 gallons, based on AP-42, Table 1.5-1, dated 7/08
$SO_2$	0.1 lb/1000 gallons, based on AP-42, Table 1.5-1, dated 7/08
$NO_X$	13.0 lb/1000 gallons, based on AP-42, Table 1.5-1, dated 7/08
CO	7.5 lb/1000 gallons, based on AP-42, Table 1.5-1, dated 7/08
VOC	1.0 lb/1000 gallons, based on AP-42, Table 1.5-1, dated 7/08

Opacity 06-096 C.M.R. ch. 115, BPT

The BPT emission limits for the dryer are as follows:

Equipment	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Dryer	0.01	0.01	0.01	0.15	0.08	0.01

Visible emissions from Stack #4 shall not exceed 10% opacity on a six-minute block average basis.

### E. Surface Coating Equipment

Valmet operates Paint Spray Booth #6 for coating various metal parts and products produced at the facility. Paint is applied to the products via hand-held paint spray guns. High volume/low pressure (HVLP) spray guns are typically used for paint application, but there are instances in which HVLP spray guns are not feasible for application of certain types of paint. Air is drawn through polyester filters along the back wall of the booth and vented outside through three horizontal exhaust fans. Paints used in the spray booth contain both Volatile Organic Compounds (VOCs) and Hazardous Air Pollutants (HAPs). In addition, some particulate matter is emitted in the painting process.

Previously, Valmet was required to exclusively use HVLP spray guns. According to requirements set forth in 40 C.F.R. Part 63 Subpart XXXXXX, (Metal Fabrication/Finishing NESHAP), HVLP guns are required if the paints being applied contain cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight, and materials that contain manganese in amounts greater than or equal to 1.0 percent by weight. After reviewing documentation submitted by Valmet as part of their 2011 license application, the Department determined that the paints being applied do not exceed these limits. Therefore, Valmet is not required to exclusively use HVLP spray guns.

Maximum potential VOC and HAP emissions from the paint spray booth have been calculated at 940 and 1,667 lb/year, respectively, based on a maximum paint application of 4 hours per day and 50 days per year. HAPs are not emitted in amounts greater than DEP's insignificant activity threshold value of 1 ton per year, per 06-096 C.M.R. ch. 115, Appendix B, Section B(1)(C). Valmet shall maintain records to demonstrate that total HAPs from the Paint Spray Booth do not exceed 1 ton per year, on a twelve-month rolling-total basis.

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Prior to welding, Valmet applies an anti-spatter spray, known as 'Nozzle Kleen', via aerosol cans to the surface of metal parts. The Nozzle Kleen anti-spatter spray contains methylene chloride, which is considered to be a HAP. More recently, Valmet has been migrating towards using an inert gas product in place of the Nozzle Kleen spray, when practical. The inert gas contains no HAPs or VOCs.

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Both the painting process and the anti-spatter application are considered surface coating of miscellaneous metal parts as defined in *Surface Coating Facilities*, 06-096 C.M.R. ch. 129. Facilities may be exempted from these emission limitations if the following VOC criteria are met:

- The maximum theoretical emissions from all surface coating operations are limited by permit or order of the Department to 1,666 lb or less in any calendar month;
- The facility subject to 06-096 C.M.R. ch. 129 is and has at all times been in compliance with the maximum theoretical emission limitation since the issuance of the permit or order of the Department; and,
- The total actual emissions from the surface coating facility have not exceeded 1,666 lb in any calendar month since January 1990.

In order to be exempt from requirements of 06-096 C.M.R. ch. 129, Valmet shall not exceed 1,500 lb/month of VOC from Paint Spray Booth #6, and 5,000 lb/year of HAPs from the Anti-Spatter Spray Application.

BPT for the Process Equipment is the following:

- 1. A VOC limit of 1,500 lb/month from all paint-spraying operations;
- 2. The use of HVLP paint spray guns (when feasible) and polyester filters in Paint Spray Booth #6;
- 3. A HAP limit of 5,000 lb/year from the application of Anti-Spatter Spray;
- 4. Visible emissions from Stacks #5, #6 and #7 (serving Paint Spray Booth #6) shall not exceed 10% opacity on a six-minute block average basis.

#### F. PM Emissions from Activities Conducted Exterior to the Building

Valmet shall minimize the potential for fugitive PM emissions from any processes (such as sanding, grinding, sandblasting, etc) conducted outside by limiting such activity to periods of calm winds or through the use of a shroud or wind curtain. BPT for particulate matter emissions for fugitive sources, such as sandblasting, performed outdoors shall be a

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visible emissions limit: these sources shall not exceed 20% opacity, except for no more than five minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20% in any one hour.

#### G. General Process Emissions

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

#### H. Annual Emissions

#### 1. Total Annual Emissions

Valmet shall be restricted to the following annual emission per calendar year. The tons per year limits were calculated based on Boilers #1, #2, #3 & #7 and the dryer operating 8,760 hours/year. VOC and HAP emissions from Paint Spray Booth #6 and the application of the Anti-Spatter spray were calculated using limits of 1,500 lb/month of VOC from Paint Spray Booth #6 and 5,000 lb/year of HAPs from the Anti-Spatter Application.

Total Licensed Annual Emissions for the Facility
Tons/year
(used to calculate the annual license fee)

Unit	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC	НАР
Boiler #1	0.07	0.07	2.40	1.70	0.17	0.01	
Boiler #2	0.07	0.07	2.40	1.70	0.17	0.01	
Boiler #3	0.09	0.09	3.06	2.15	0.22	0.01	
Boiler #7	0.13	0.13	4.38	3.06	0.31	0.02	
Dryer	0.01	0.02	0.01	0.66	0.36	0.05	
Paint Spray Booth #6						9.00	1.0
Anti-Spatter							2.5
Total TPY	0.38	0.38	12.25	9.27	1.23	9.10	3.5

#### 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 C.M.R. 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 (CO<sub>2</sub>e).

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The quantity of CO<sub>2</sub>e emissions from this facility is less than 100,000 tons per year, based on the following:

- the types of fuel being fired;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and 40 CFR Part 98, *Mandatory Greenhouse Gas Reporting*; and
- global warming potentials contained in 40 CFR 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 shall be determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. 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	25
PM <sub>10</sub>	25
$SO_2$	50
NO <sub>x</sub>	100
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.

#### **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-851-71-C-R subject to the following conditions.

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<u>Severability</u>. 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.

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#### 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]

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- (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

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- 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) **Boilers #1, #2, #3 and #7**

#### A. Fuel

- 1. Boilers #1, #2, #3 and #7 are each licensed to fire distillate fuel only. [06-096 C.M.R. ch. 115, BPT]
- 2. Prior to July 1, 2018, Boilers #1, #2, #3 and #7 shall fire distillate fuel with a maximum sulfur content not to exceed 0.5% by weight. [06-096 C.M.R. ch. 115, BPT]

- 3. Beginning July 1, 2018, Valmet shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BPT]
- 4. Compliance for Boilers #1, #2, #3 and #7 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 calendar year basis. [06-096 C.M.R. ch. 115, BPT]
- B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Equipment	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	0.02	0.02	0.55	0.39	0.04	0.01
Boiler #2	0.02	0.02	0.55	0.39	0.04	0.01
Boiler #3	0.02	0.02	0.70	0.49	0.05	0.01
Boiler #7	0.03	0.03	1.00	0.70	0.07	0.01

- C. Visible emissions from Stacks #1, #2 and #8 shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]
- D. Boiler MACT (40 C.F.R. Part 63, Subpart JJJJJJ) Requirements for Boiler #7 [incorporated under 06-096 C.M.R. ch. 115, BPT]
  - 1. The facility shall implement a boiler tune-up program. [40 C.F.R. § 63.11223]
    - a. 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
New and Existing Oil, Biomass, and Coal fired Boilers with less freq	uent tune up requirements
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 an optimum air- to-fuel ratio that would otherwise be subject to a biennial tune up	Every 5 years

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- b. The boiler tune-up program, conducted 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, not to exceed 36 months from the previous inspection. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 C.F.R. § 63.11223(b)(1)]
  - (2) Inspect the flame pattern, <u>as applicable</u>, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F..R § 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 inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 C.F.R. § 63.11223(b)(3)]
  - (4) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 63.11223(b)(7)]
  - c. <u>Tune-Up Report</u>: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:

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- (1) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
- (2) A description of any corrective actions taken as part of the tune-up of the boiler; and
- (3) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

### 2. Compliance Report

A compliance report shall be prepared by March 1<sup>st</sup> every five years which covers the previous five calendar years. The report shall be maintained by Valmet and submitted to the Department and to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

- a. Company name and address;
- b. A statement of whether the source has complied with all the relevant requirements of this Subpart;
- c. A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- d. The following certifications, as applicable:
  - (1) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
  - (2) "No secondary materials that are solid waste were combusted in any affected unit."
  - (3) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

# (17) Dryer

- A. The dryer shall fire propane as fuel. Compliance shall be demonstrated by maintaining recordkeeping to document fuel use or quantity of fuel delivered on a calendar-year basis. [06-096 C.M.R. ch. 115, BPT]
- B. Emissions from the dryer shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Equipment	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Dryer	0.01	0.01	0.01	0.15	0.08	0.01

B. Visible emissions from Stack #4 shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

### (18) Surface Coating Equipment

- A. Valmet shall not exceed 9 tons/year and 1500 lb/month of VOC from Paint Spray Booth #6. The ton/year limit shall be on a twelve-month rolling total basis; the lb/month limit shall be on a calendar month basis. Compliance shall be demonstrated through records maintained on a calendar month basis showing the amount of paint used in the Paint Spray Booth, the percent VOC for each type of paint, and the total amount of VOC emitted from the spray booth for the month. The most recent twelve consecutive calendar month records shall be used to show compliance with the ton/year emission limit. [06-096 C.M.R. ch. 129, BPT]
- B. Valmet shall not exceed 1 ton of HAPs per year from Paint Spray Booth #6. Compliance shall be demonstrated through monthly usage records showing the percent HAP content of the paint used that month. The most recent twelve consecutive month records shall be used to show compliance with the annual limit on a twelve-month rolling total basis. [06-096 C.M.R. ch. 129, BPT]
- C. When feasible, Valmet shall operate HVLP paint spray guns and maintain polyester filters in Paint Spray Booth #6. In the event that HVLP guns cannot be used, all other spray guns shall be properly maintained, adjusted and utilized in a manner that minimizes overspray. [06-096 C.M.R. ch. 129, BPT]
- D. Visible emissions from the Paint Spray Booth #6 vents shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]
- E. Valmet shall not exceed 5000 pounds of HAPs per year from the application of Anti-Spatter Spray. Compliance shall be demonstrated through monthly usage records showing the percent HAP of the Anti-Spatter Spray used during that month. The

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most recent twelve consecutive month records shall be used to show compliance with the annual limit on a twelve-month rolling basis. [06-096 C.M.R. ch. 115, BPT]

# (19) PM Emissions from Activities Conducted Exterior to the Building

Valmet shall minimize the potential for fugitive PM emissions from any processes (such as sanding, grinding, sandblasting, etc) conducted outside by limiting such activity to periods of calm winds or through the use of a shroud or wind curtain. BPT for particulate matter emissions for fugitive sources, such as sandblasting, performed outdoors shall be a visible emissions limit: these sources shall not exceed 20% opacity, except for no more than five minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20% in any one hour.

### (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 C.M.R. ch. 115, BPT]

(21) Valmet shall notify the Department within 48 hours and submit a report to the Department on a <u>quarterly basis</u> 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 20 DAY OF  $Apr_t$  , 2017. DEPARTMENT OF ENVIRONMENTAL PROTECTION

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: October 24, 2016

Date of application acceptance: October 26, 2016

Date filed with the Board of Environmental Protection:

This Order prepared by Kevin J Ostrowski, Bureau of Air Quality.

