



DEPARTMENT ORDER

**Fiber Materials Inc.
York County
Biddeford, Maine
A-262-71-AD-A**

**Departmental
Findings of Fact and Order
Air Emission License
Amendment #4**

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

Fiber Materials Inc. (FMI) was issued Air Emission License A-262-71-Z-R on March 20, 2014, for the operation of emission sources associated with their carbon composite manufacturing facility. The license was subsequently amended on September 25, 2017 (A-262-71-AA-M), May 29, 2019 (A-262-71-AB-M), and September 13, 2019 (A-262-71-AC-M).

The equipment addressed in this license amendment is located at 5 Morin Street, Biddeford, Maine.

FMI has requested an amendment to their license in order to make the following changes:

1. Install five new pairs of impregnation vessels;
2. Install three new carbonizers and an associated incinerator;
3. Remove the R&D Carbonizer;
4. Install two new Hot Isostatic Press (HIP) vessels;
5. Remove three graphitizers and add two new ones to Bank A/B;
6. Add three new graphitizers as part of a new bank (Bank H);
7. Remove the Placed Fiber/Pre-preg Production process;
8. Remove the GII Oven, D1 Oven, and Gehrlich Retort Oven;
9. Add a small, natural gas-fired boiler (Bldg 2 Boiler); and
10. Add an emergency generator (Bldg 1-2-6 Generator).

This amendment will also update some of the facility's visible emission requirements and federal requirements pertaining to the facility's engines.

B. Emission Equipment

Following is an updated inventory of emissions equipment at FMI:

Boilers

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate (scf/hr)	Fuel Type, % sulfur	Date of Install.
Boiler #1	1.7	1,703	natural gas, negligible	2000
Boiler #4a	1.2	1,132	natural gas, negligible	2017
Boiler #4b	1.2	1,132	natural gas, negligible	2017
Bldg 2 Boiler ¹	0.5	510	natural gas, negligible	2021

¹ This new boiler is an insignificant activity and listed for completeness only.
 [06-096 C.M.R. ch. 115, Appendix B, § B.2]

Generators

Equipment	Output (kW)	Max. Input Capacity (MMBtu/hr)	Firing Rate (gal/hr)	Fuel Type, % sulfur	Manf. Date
Bldg 2 Generator ²	100	1.1	7.9	distillate fuel, 0.0015%	2006
Bldg 3 Generator	200	2.3	16.8	distillate fuel, 0.0015%	2005
Bldg 1-2-6 Generator ³	400	3.7	27.3	distillate fuel, 0.0015%	2014

² Renamed from Bldg 1-2 Generator

³ New equipment

Process Equipment

Equipment	Number of Units	Control Device
Impregnation Vessels ⁴	10 pair	Condenser/Coalescent Filters
Atmospheric Carbonizers 1-3	3	Incinerator #3
Atmospheric Carbonizers 4-6 ⁵	3	Incinerator #9
Silicon Carbide Carbonizer (AC 2)	1	N/A
Douglas Impregnator/Carbonizers	2	Condensers, Filters, & Incinerator #3
Hot Isostatic Press Vessels (HIP 1-5)	5	Wet Scrubber
Hot Isostatic Press Vessels (HIP 6-7) ⁵	2	Catch-Can & Wet Scrubber
Graphitizers #22 & #23	2	Incinerator #4
A/B Graphitizers ⁶	7	Incinerator #2
G/F Graphitizers ⁷	6	Incinerator #1
H Graphitizers ⁵	3	Incinerator #1
S1 & B1 Retort Ovens	2	Incinerator #5
Drying Ovens	4	N/A
Bldg 3 Machine Shop	Misc.	Dust Collectors
Bldg 5 Machine Shop	Misc.	Dust Collectors
Parts Washers	2	N/A

⁴ Includes five existing pair and five new pair

⁵ New equipment

⁶ This licensing action removes three units and adds two new units.

⁷ D/F Graphitizers renamed to G/F Graphitizers

C. Definitions

Distillate Fuel means the following:

- 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 date this license was issued.

The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the “Significant Emission” levels as defined in the Department’s *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. The emission increases are determined by subtracting the current licensed annual emissions preceding the modification from the maximum future licensed annual emissions, as follows:

Pollutant	Current License (TPY)	Future License (TPY)	Net Change (TPY)	Significant Emission Levels
PM	4.2	3.4	-0.8	100
PM ₁₀	4.2	3.4	-0.8	100
SO ₂	0.0	0.0	–	100
NO _x	13.0	11.9	-1.1	100
CO	6.6	5.5	-1.1	100
VOC	15.0	18.0	+3.0	50

This modification is determined to be a minor modification and has been processed as such.

E. Facility Classification

With the annual facility limits on volatile organic compounds (VOC) and hazardous air pollutants (HAP) and the operating hours restriction on the emergency generators, the facility is licensed as follows:

- As a synthetic minor source of air emissions, because FMI is subject to license restrictions that keep facility emissions below major source thresholds for criteria pollutants; and
- As an area source of HAP, because the licensed emissions are below the major source thresholds for HAP.

II. **BEST PRACTICAL TREATMENT (BPT)**

A. Introduction

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

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 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. Visible Emissions

Since FMI's previous license, *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101, has been revised. This license amendment updates the visible emission requirements as applicable based on the current rule.

C. Generator Demand Response Language

Bldg 2 Generator and Bldg 3 Generator are subject to *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ. On May 1, 2015, the U.S. Court of Appeals issued a decision specifically vacating § 63.6640(f)(2), which had allowed for limited operation for emergency demand response purposes. This license updates the applicable requirements for the facility's emergency generators to address this change to the federal rule.

D. Process Overview

FMI produces carbon fiber composite parts. Production of the parts consists of a four-step process: weaving, impregnation, carbonization, and graphitization.

In the weaving step, carbon fiber yarn is hand-woven to create forms that make up the basic structure of each part. The weaving process does not generate any emissions of regulated air pollutants.

Following weaving, the completed carbon fiber forms (also known as "billets") are impregnated with coal tar pitch in a pair of impregnation vessels. One vessel in the pair is filled with coal tar pitch which is electrically heated to approximately 300 °C to melt the pitch and reduce its viscosity to approximately the consistency of water. The other vessel in the pair contains the billet to be impregnated. It is also heated to 300 °C. The air is evacuated from the vessel containing the billet, and the pitch is pumped from the melting vessel into the evacuated vessel, thereby impregnating the billet with coal tar pitch.

The billets then enter the carbonization stage which converts the coal tar pitch to carbon coke. The atmospheric carbonizers are electrically heated to approximately 800 °C in a nitrogen environment at atmospheric pressure.

As an alternative to the atmospheric carbonization process, some billets are processed using the Hot Isostatic Press (HIP) system. The billets are placed in a large electric furnace which is then placed in an autoclave. The HIP furnace is capable of heating to approximately

750 °C, while the autoclave is capable of being pressurized with argon up to 15,000 psig (pounds per square inch gauge).

The billets, which are now covered in carbon, go through a graphitization process where the disordered carbon atoms undergo a structural change to create pure graphite. The process must occur at high temperatures to allow the chaotic carbon atoms to travel to form ideal and homogenous graphite layers. The graphitizers are electric induction furnaces capable of heating to approximately 2,750 °C. The temperature of the graphitizer is monitored using a thermocouple up to 950 °C and using a two-color infrared system for temperatures greater than 950 °C. The graphitizers are continuously purged with nitrogen to prevent oxidation of the carbon and/or graphite.

E. Impregnation Vessels

FMI is currently licensed to operate five pairs of impregnation vessels and has proposed adding five additional new pairs identical to the existing units.

The impregnation vessels are exhausted via a vacuum pump. They emit coal tar pitch volatiles as well as very small amounts of carbon monoxide (CO). The coal tar pitch volatiles contain both VOC and HAP. The existing impregnation vessels are controlled by a condensing trap vessel and coalescent filter mounted in-line with a vacuum pump used for maintaining vacuum in the impregnation vessels. This control technology is estimated to capture and control emissions with an efficiency greater than 99%.

FMI performed on-site testing on the outlet of the facility's existing impregnation vessels. The maximum VOC emission rate observed was 0.08 lb/hr and the maximum HAP emission rate observed was 0.04 lb/hr from each vessel pair.

FMI proposes utilizing a condensing trap vessel and coalescent filter on each of the five new impregnation vessels. The Department finds the use of this control equipment and compliance with facility-wide emission limits of 18.0 tpy for VOC and 5.0 tpy for total HAP to represent BACT for control of emissions from the new impregnation vessels.

Visible emissions from each impregnation vessel vent shall not exceed 10% opacity on a six-minute block average basis.

F. Atmospheric Carbonizers

FMI is currently licensed to operate three atmospheric carbonizers and has proposed adding three additional new units.

The carbonization process releases hydrogen, methane, and hydrocarbon vapors containing both VOC and HAP. FMI has proposed controlling emissions from the new carbonizers with a new thermal oxidizer (Incinerator #9). Incinerator #9 will maintain a temperature of

at least 1,450 °F throughout the carbonization cycle and meet a minimum retention time of 1.0 second. The manufacturer specifies the unit will obtain a 99+% destruction efficiency for concentrations greater than 500 ppm utilizing a natural gas-fired burner rated at 2.0 MMBtu/hr of heat input.

FMI operates a similar control unit (Incinerator #3) on the existing atmospheric carbonizers. FMI performed on-site testing of Incinerator #3's outlet. The maximum VOC/HAP emission rate observed was 0.006 lb/hr.

The Department finds the use of Incinerator #9 as specified above and compliance with facility-wide emission limits of 18.0 tpy for VOC and 5.0 tpy for total HAP to represent BACT for control of emissions from the new atmospheric carbonizers.

Visible emissions from Incinerator #9 shall not exceed 10% opacity on a six-minute block average basis.

G. HIP Vessels

FMI is currently licensed to operate five HIP vessels and has proposed adding two additional new units.

In the HIP cycle, hydrocarbon gases are exhausted from the autoclave during brief pulses. The exhaust gas goes through a tremendous pressure drop and the cooling that results causes some of the heavy hydrocarbons to condense out. FMI has proposed controlling emissions from the new HIP vessels by equipping each vessel with a catch-can to collect the condensed hydrocarbons followed by a wet scrubber. Each wet scrubber will operate in an identical manner to the wet scrubbers operated on the existing HIP vessels. The wet scrubber sprays water into the exhaust stream, the water is then collected and recycled. The wet scrubbers are rated for 99% collection and removal of pitch volatiles.

FMI performed on-site testing of the outlet of the wet scrubbers associated with the existing HIP vessels. The maximum VOC/HAP emission rate observed was 0.009 lb/hr per vessel. Due to the incorporation of the catch-can in the new HIP vessels, emissions from the new units are expected to be even lower.

The Department finds the use of a catch-can and wet scrubber on each new HIP vessel and compliance with facility-wide emission limits of 18.0 tpy for VOC and 5.0 tpy for total HAP to represent BACT for control of emissions from the new HIP vessels.

Visible emissions from the HIP vessels shall not exceed 10% opacity on a six-minute block average basis.

H. Graphitizers

FMI is currently licensed to operate 16 graphitizers (eight in the A/B Graphitizers bank, six in the G/F Graphitizers bank, and Graphitizers #22 & #23). The facility has proposed removing three of the A/B Graphitizers and replacing them with two new units. Additionally, they have proposed adding a new bank (H Graphitizers) with three new units. After this amendment, the facility will be licensed to operate a total of 18 graphitizers.

Emissions of VOC/HAP from the existing graphitizer furnaces are drawn into a duct leading to a thermal oxidizer (Incinerator #1 or #2). Both Incinerators #1 and #2 maintain a temperature of at least 1,600 °F throughout the graphitization cycle and meet a minimum retention time of 1.0 second. FMI performed on-site testing of an existing graphitizer incinerator. The maximum VOC/HAP emission rate observed was 0.04 lb/hr

FMI has proposed controlling emissions from the two new A/B Graphitizers with Incinerator #2, as was done for the three units that have been removed. FMI proposes controlling emissions from the three new H Graphitizers with Incinerator #1 which will be shared with the existing G/F Graphitizers.

The Department finds the use of Incinerator #2 for control of the new A/B Graphitizers and the use of Incinerator #1 for control of the H Graphitizers and compliance with facility-wide emission limits of 18.0 tpy for VOC and 5.0 tpy for total HAP to represent BACT for control of emissions from the new graphitizers.

Visible emissions from Incinerator #1 and #2 (each) shall not exceed 10% opacity on a six-minute block average basis.

I. Bldg 1-2-6 Generator

FMI has proposed the installation of a new emergency generator (Bldg 1-2-6 Generator). It is a generator set consisting of an engine and electrical generator. Bldg 1-2-6 Generator will be rated at 400 kW of electrical output (3.7 MMBtu/hr heat input) and will fire distillate fuel with a sulfur content not to exceed 0.0015% by weight. FMI intends to install a used unit with a manufacture date of 2014.

1. BACT Findings

The BACT emission limits for the Bldg 1-2-6 Generator are based on the following:

- PM/PM₁₀ - 0.12 lb/MMBtu from 06-096 C.M.R. ch. 103
- SO₂ - combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
- NO_x - 4.41 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96
- CO - 0.95 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96
- VOC - 0.35 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96
- Visible Emissions - 06-096 C.M.R. ch. 115, BACT

The BACT emission limits for the Bldg 1-2-6 Generator are the following:

Unit	Pollutant	lb/MMBtu
Bldg 1-2-6 Generator	PM	0.12

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Bldg 1-2-6 Generator	0.45	0.45	0.01	16.49	3.55	1.31

Visible emissions from Bldg 1-2-6 Generator shall not exceed 20% opacity on a six-minute block average basis.

2. 40 C.F.R. Part 60, Subpart III

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart III is applicable to the emergency engine listed above since the unit was ordered after July 11, 2005, and manufactured after April 1, 2006. [40 C.F.R. § 60.4200] By meeting the requirements of 40 C.F.R. Part 60, Subpart III, the unit also meets the requirements found in the *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ. [40 C.F.R. § 63.6590(c)]

A summary of the currently applicable federal 40 C.F.R. Part 60, Subpart III requirements is listed below.

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 60, Subpart III, a stationary reciprocating internal combustion engine (ICE) is considered an **emergency** stationary ICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine

to no longer be considered an emergency engine under 40 C.F.R. Part 60, Subpart III, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(1) Emergency Situation Operation (On-Site)

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster or equipment failure;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

- (i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE more than 100 hours per calendar year.
- (ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. **However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.**

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

b. 40 C.F.R. Part 60, Subpart III Requirements

(1) Manufacturer Certification Requirement

The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in 40 C.F.R. § 60.4202. [40 C.F.R. § 60.4205(b)]

(2) Ultra-Low Sulfur Fuel Requirement

The fuel fired in the engine shall not exceed 15 ppm sulfur (0.0015% sulfur). [40 C.F.R. § 60.4207(b)]

(3) Non-Resetable Hour Meter Requirement

A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 60.4209(a)]

(4) Operation and Maintenance Requirements

The engine shall be operated and maintained according to the manufacturer's emission-related written instructions. FMI may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

(5) Annual Time Limit for Maintenance and Testing

As an emergency engine, the unit shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). [40 C.F.R. § 60.4211(f)]

(6) Initial Notification Requirement

No initial notification is required under 40 C.F.R. Part 60, Subpart III for emergency engines. [40 C.F.R. § 60.4214(b)]

(7) Recordkeeping

FMI shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

J. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility’s annual air license fee. Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included. Maximum potential emissions were calculated based on the following assumptions:

- Operating each boiler for 8,760 hrs/yr;
- Operating each generator for 100 hrs/yr;
- A facility-wide VOC limit of 18.0 tpy; and
- A facility-wide HAP limit of 9.9 tpy.

Please note, this information provides the basis for fee calculation only and should not be construed to represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

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

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC	Total HAP
Boiler #1	0.4	0.4	–	0.7	0.6	–	–
Boiler #4a	0.3	0.3	–	0.5	0.4	–	–
Boiler #4b	0.3	0.3	–	0.5	0.4	–	–
Bldg 2 Generator	–	–	–	0.2	0.1	–	–
Bldg 3 Generator	–	–	–	0.5	0.1	–	–
Bldg 1-2-6 Generator	–	–	–	0.8	0.2	–	–
Incinerator #1	0.4	0.4	–	1.4	0.6	–	–
Incinerator #2	0.4	0.4	–	1.4	0.6	–	–
Incinerator #3	0.4	0.4	–	1.4	0.6	–	–
Incinerator #4	0.4	0.4	–	1.4	0.6	–	–
Incinerator #5	0.3	0.3	–	1.3	0.5	–	–
Incinerator #9	0.5	0.5	–	1.8	0.8	–	–
Facility-Wide Limit	–	–	–	–	–	18.0	9.9
Total TPY	3.4	3.4	–	11.9	5.5	18.0	9.9

III. AMBIENT AIR QUALITY ANALYSIS

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

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 amendment.

ORDER

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

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

The Department hereby grants Air Emission License Amendment A-262-71-AD-A subject to the conditions found in Air Emission License A-262-71-Z-R, in amendments A-262-71-AA-M, A-262-71-AB-M, and A-262-71-AC-M, and the following conditions.

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

Extensive changes have been made to the facility's Specific Conditions since the last renewal. Therefore, for clarity this license consolidates all currently applicable Standard and Specific Conditions in this Order. No changes to requirements are intended except where specifically addressed in the Findings of Fact.

Therefore, the following replaces all currently applicable Standard and Specific Conditions in air emission licenses previously issued to the facility.

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 the written test report by the Department, or another alternative timeframe approved by the Department, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department; and
 - B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

- C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
[06-096 C.M.R. ch. 115]
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or license requirement. [06-096 C.M.R. ch. 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 C.M.R. ch. 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.
[06-096 C.M.R. ch. 115]
- (16) The licensee shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S. § 605). [06-096 C.M.R. ch. 115]

SPECIFIC CONDITIONS

(17) **Boilers #1, #4a, and #4b**

A. Boilers #1, #4a, and #4b shall fire only natural gas.
[06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Emission Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	0.09	0.09	–	0.17	0.14	0.01
Boiler #4a	0.06	0.06	–	0.11	0.10	0.01
Boiler #4b	0.06	0.06	–	0.11	0.10	0.01

C. Visible emissions from Boilers #1, #4a, and #4b shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(A)(3)]

(18) **Bldg 2 Generator, Bldg 3 Generator, and Bldg 1-2-6 Generator**

(BPT applies to Bldg 2 Generator and Bldg 3 Generator. BACT applies to Bldg 1-2-6 Generator.)

A. Each of the emergency generators shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations.

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

B. The fuel sulfur content for the emergency generators shall be limited to 0.0015% sulfur by weight. Compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the tank containing the fuel to be fired. [06-096 C.M.R. ch. 115, BPT/BACT]

C. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Bldg 1-2-6 Generator	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)

D. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT/BACT]:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Bldg 2 Generator	0.13	0.13	–	4.76	1.03	0.38
Bldg 3 Generator	0.28	0.28	–	10.14	2.19	0.81
Bldg 1-2-6 Generator	0.45	0.45	–	16.49	3.55	1.31

E. Visible Emissions

1. Visible emissions from Bldg 2 Generator and Bldg 3 Generator shall each not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time FMI may comply with the following work practice standards in lieu of the numerical visible emissions standard. [06-096 C.M.R. ch. 101, § 3(A)(4)]

a. Maintain a log (written or electronic) of the date, time, and duration of all generator startups.

- b. Operate the generators in accordance with the manufacturer's emission-related operating instructions.
 - c. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations shall apply.
 - d. Operate the generators, including any associated air pollution control equipment, at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.
2. Visible emissions from Bldg 1-2-6 Generator shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]
- F. Bldg 2 Generator and Bldg 3 Generator shall meet the applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ, including the following:
[incorporated under 06-096 C.M.R. ch. 115, BPT]
1. FMI shall meet the following operational limitations for Bldg 2 Generator and Bldg 3 Generator:
 - a. Change the oil and filter every 500 hours of operation or annually, whichever comes first;
 - b. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
 - b. Inspect the hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Records shall be maintained documenting compliance with the operational limitations.

[40 C.F.R. § 63.6603(a) and Table 2(d); and 06-096 C.M.R. ch. 115]

2. Oil Analysis Program Option

FMI has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, FMI must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for each engine. The analysis program must be part of the maintenance plan for each engine. [40 C.F.R. § 63.6625(i)]

3. Non-Resetable Hour Meter
A non-resettable hour meter shall be installed and operated on each engine.
[40 C.F.R. § 63.6625(f)]
4. Maintenance, Testing, and Non-Emergency Operating Situations
 - a. As emergency engines, the units shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise to supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written logs) of all engine operating hours. [40 C.F.R. § 63.6640(f) and 06-096 C.M.R. ch. 115]
 - b. FMI shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. §§ 63.6655(e) and (f)]
5. Operation and Maintenance
The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or FMI shall develop a maintenance plan which provides to the extent practicable for the maintenance and operation of each engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 63.6625(e)]
6. Startup Idle and Startup Time Minimization
During periods of startup, the facility must minimize each engine's time spent at idle and minimize each engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
[40 C.F.R. § 63.6625(h) & 40 C.F.R. Part 63, Subpart ZZZZ Table 2d]
- G. Bldg 1-2-6 Generator shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart III, including the following:
[incorporated under 06-096 C.M.R. ch. 115, BACT]
 1. Manufacturer Certification
The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in § 60.4202.
[40 C.F.R. § 60.4205(b)]

2. Ultra-Low Sulfur Fuel

The fuel fired in the engine shall not exceed 15 ppm sulfur (0.0015% sulfur). Compliance with the fuel sulfur content limit shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the tank containing the fuel to be fired.

[40 C.F.R. § 60.4207(b) and 06-096 C.M.R. ch. 115, BACT]

3. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on the engine.

[40 C.F.R. § 60.4209(a)]

4. Annual Time Limit for Maintenance and Testing

a. As an emergency engine, the unit shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written log) of all engine operating hours.

[40 C.F.R. § 60.4211(f) and 06-096 C.M.R. ch. 115, BACT]

b. FMI shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time.

[40 C.F.R. § 60.4214(b)]

5. Operation and Maintenance

The engine shall be operated and maintained according to the manufacturer's emission-related written instructions. FMI may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

(19) **Facility-Wide Emission Limits**

A. FMI shall not exceed an emission limit of 18.0 tons per year of VOC based on a 12-month rolling year total. This is a facility-wide limit. As such, emissions from all equipment and processes at the facility and addressed in the air emission license shall be included in calculations used to determine compliance with this limit.

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

B. FMI shall not exceed an emission limit of 9.9 tons per year for all HAPs combined based on a 12-month rolling total. This is a facility-wide limit. As such, emissions from all equipment and processes at the facility and addressed in the air emission license

shall be included in calculations used to determine compliance with this limit, including HAP emissions from fuel burning equipment and all other HAP emission sources. HAPs are as identified in 06-096 C.M.R. ch. 115, Appendix B and in Section 112(b) of the CAA. [06-096 C.M.R. ch. 115, BACT]

- C. Compliance with the VOC and HAP emission limits shall be demonstrated by recordkeeping including the following as applicable: fuel usage, hours of operation, and site-specific test data. Emissions from the Silicon Carbide Carbonizer and the Douglas Impregnator/Carbonizer shall be conservatively calculated based on site-specific emission rates developed for other similar equipment (i.e., the impregnation vessels and the atmospheric carbonizers). Calculations of annual VOC and HAP emissions shall be performed at least once annually. Additional calculation of emissions to demonstrate compliance with these limits shall be performed upon request by the Department. [06-096 C.M.R. ch. 115, BACT]

(20) **Impregnation Vessels**

(Includes ten pair of impregnation vessels and the impregnation stage when using the Douglas Impregnator/Carbonizer.)

- A. FMI is licensed to operate up to a total of ten pair of impregnation vessels and the Douglas Impregnator/Carbonizer. [06-096 C.M.R. ch. 115, BACT]
- B. FMI shall vent all emissions from the impregnation vessels through the associated condenser and coalescent filter. [06-096 C.M.R. ch. 115, BACT]
- C. FMI shall maintain a log of the date and details of any repairs or maintenance (planned or unplanned) performed on the condensers and coalescent filters including dates of routine draining of the condensate. [06-096 C.M.R. ch. 115, BACT]
- D. Visible emissions from each impregnation vessel vent shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT/BACT]

(21) **Atmospheric Carbonizations**

(Includes six atmospheric carbonizers and the carbonization stage when using the Douglas Impregnator/Carbonizer.)

(BPT applies to the three existing atmospheric carbonizers. BACT applies to the three new atmospheric carbonizers.)

- A. FMI is licensed to operate up to a total of six atmospheric carbonizers and the Douglas Impregnator/Carbonizer. [06-096 C.M.R. ch. 115, BACT]
- B. FMI shall continuously control VOC and HAP emissions from Atmospheric Carbonizers 1-3 and the Douglas Impregnator/Carbonizer by the use of Incinerator #3. Upon power termination to all four carbonizer furnaces, the use of the incinerator may

be discontinued when the temperature of the carbonizers drops below 110 °C and a minimum of eight hours has elapsed from the time the furnace power was shut off. [06-096 C.M.R. ch. 115, BPT]

- C. FMI shall continuously control VOC and HAP emissions from Atmospheric Carbonizers 4-6 by the use of Incinerator #9. Upon power termination to all three carbonizer furnaces, the use of the incinerator may be discontinued when the temperature of the carbonizers drops below 110 °C and a minimum of eight hours has elapsed from the time the furnace power was shut off. [06-096 C.M.R. ch. 115, BACT]
- D. FMI shall maintain a log of the date and details of any repairs or maintenance (planned or unplanned) performed on Incinerators #3 and #9. [06-096 C.M.R. ch. 115, BPT/BACT]
- E. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT/BACT]:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)
Incinerator #3	0.08	0.08	–	0.32	0.13
Incinerator #9	0.11	0.11	–	0.41	0.17

- F. FMI shall maintain a minimum temperature of 1,450 °F in Incinerator #3 and Incinerator #9 (as applicable) at all times during a carbonization process. [06-096 C.M.R. ch. 115, BPT/BACT]
- G. A pyrometer or thermocouple shall be installed and maintained at the location of the incinerator or refractory-lined stack which provides sufficient volume to insure a flue gas retention time of not less than 1.0 second. [06-096 C.M.R. ch. 115, BPT/BACT]
- H. The temperature of each incinerator shall be monitored continuously and recorded at least once hourly whenever any associated carbonizer is in operation. [06-096 C.M.R. ch. 115, BPT/BACT]
- I. FMI shall keep a log for each carbonizer detailing dates and times of operation. [06-096 C.M.R. ch. 115, BPT/BACT]
- J. Visible emissions from Incinerators #3 and #9 shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT/BACT]

(22) **Silicon Carbide Carbonizer**

- A. The Silicon Carbide Carbonizer shall exhaust to Stack #33. [06-096 C.M.R. ch. 115, BPT]

- B. Visible emissions from Stack #33 shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

(23) **HIP Vessels**

- A. FMI is licensed to operate up to a total of seven HIP vessels. [06-096 C.M.R. ch. 115, BACT]
- B. For the existing HIP Vessels (HIP 1-5), FMI shall control emissions from each vessel by venting emissions through the associated wet scrubber throughout each HIP cycle. [06-096 C.M.R. ch. 115, BPT]
- C. For the new HIP Vessels (HIP 6-7), FMI shall control emissions from each vessel by venting emissions through a catch-can and then the associated wet scrubber throughout each HIP cycle. [06-096 C.M.R. ch. 115, BACT]
- D. FMI shall maintain a log of the date and details of any repairs or maintenance (planned or unplanned) performed on the catch-cans and wet scrubbers including dates of routine draining of the condensate. [06-096 C.M.R. ch. 115, BPT/BACT]
- E. Visible emissions from each HIP vessel shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT/BACT]

(24) **Graphitizers**

(Includes Graphitizers #22 and #23, seven A/B Graphitizers, six G/F Graphitizers, and three H Graphitizers.)

(BPT applies to Graphitizers #22 and #23, five of the A/B Graphitizers, and the G/F Graphitizers. BACT applies to two of the A/B Graphitizers and the three H Graphitizers.)

- A. FMI is licensed to operate up to a total of 18 graphitizers. [06-096 C.M.R. ch. 115, BACT]
- B. FMI shall continuously control VOC and HAP emissions from Graphitizers #22 and #23 by the use of Incinerator #4. Upon power termination to both graphitizers, the use of the incinerator may be discontinued when the temperature of the graphitizers drops below 700 °C and a minimum of 3.5 hours has elapsed from the time the graphitizer power was shut off. [06-096 C.M.R. ch. 115, BPT]
- C. FMI shall continuously control VOC and HAP emissions from A/B by the use of Incinerator #2. Upon power termination to all A/B Graphitizers, the use of the incinerator may be discontinued when the temperature of the graphitizers drops below 700 °C and a minimum of 3.5 hours has elapsed from the time the graphitizer power was shut off. [06-096 C.M.R. ch. 115, BPT/BACT]

D. FMI shall continuously control VOC and HAP emissions from G/F Graphitizers and H Graphitizers by the use of Incinerator #1. Upon power termination to all G/F Graphitizers and H Graphitizers, the use of the incinerator may be discontinued when the temperature of the graphitizers drops below 700 °C and a minimum of 3.5 hours has elapsed from the time the graphitizer power was shut off.
[06-096 C.M.R. ch. 115, BACT]

E. FMI shall maintain a log of the date and details of any repairs or maintenance (planned or unplanned) performed on Incinerators #1, #2, and #4.
[06-096 C.M.R. ch. 115, BPT/BACT]

F. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT/BACT]:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)
Incinerator #1	0.08	0.08	–	0.32	0.13
Incinerator #2	0.08	0.08	–	0.32	0.13
Incinerator #4	0.08	0.08	–	0.32	0.13

G. FMI shall maintain a minimum temperature of 1,600 °F in Incinerators #1, #2, and #4 (as applicable) at all times during the graphitizing process.
[06-096 C.M.R. ch. 115, BPT/BACT]

H. A pyrometer or thermocouple shall be installed and maintained at the location of the incinerator or refractory-lined stack which provides sufficient volume to insure a flue gas retention time of not less than 1.0 second. [06-096 C.M.R. ch. 115, BPT/BACT]

I. The temperature of each incinerator shall be monitored continuously and recorded at least once hourly whenever any associated graphitizer is in operation.
[06-096 C.M.R. ch. 115, BPT/BACT]

J. FMI shall keep a log for each graphitizer detailing dates and times of operation.
[06-096 C.M.R. ch. 115, BPT/BACT]

K. Visible emissions from Incinerators #1, #2, and #4 shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT/BACT]

(25) **Drying Ovens**

A. FMI is licensed to operate up to a total of four drying ovens.
[06-096 C.M.R. ch. 115, BPT]

B. Visible emissions from each of the drying ovens shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

(26) **S1 and B1 Retort Ovens**

A. FMI is licensed to operate up to a total of two retort ovens (S1 and B1 Retort Ovens). [06-096 C.M.R. ch. 115, BPT]

B. FMI shall continuously control VOC and HAP emissions from the S1 and B1 Retort Ovens by the use of Incinerator #5. Upon power termination to both retort ovens, the use of the incinerator may be discontinued when the temperature of the retort ovens drops below 200 °C and a minimum of 6.5 hours has elapsed from the time the power was shut off. [06-096 C.M.R. ch. 115, BPT]

C. FMI shall maintain a log of the date and details of any repairs or maintenance (planned or unplanned) performed on Incinerator #5. [06-096 C.M.R. ch. 115, BPT]

D. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)
Incinerator #5	0.08	0.08	–	0.30	0.12

E. FMI shall maintain a minimum temperature of 1,600 °F in Incinerator #5 at all times either retort oven is in operation. [06-096 C.M.R. ch. 115, BPT]

F. A pyrometer or thermocouple shall be installed and maintained at the location of the incinerator or refractory-lined stack which provides sufficient volume to insure a flue gas retention time of not less than 1.0 second. [06-096 C.M.R. ch. 115, BPT]

G. The temperature of the incinerator shall be monitored continuously and recorded at least once hourly whenever any associated retort oven is in operation. [06-096 C.M.R. ch. 115, BPT]

H. FMI shall keep a log for each retort oven detailing dates and times of operation. [06-096 C.M.R. ch. 115, BPT]

I. Visible emissions from Incinerator #5 shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

(27) **Machine Shop**

- A. Visible emissions from each machine shop baghouse shall not exceed 10% opacity on a six-minute block average basis. FMI shall take corrective action if visible emissions from any baghouse exceeds 5% opacity on a six-minute block average basis.
[06-096 C.M.R. ch. 101, § 3(B)(3)]
- B. FMI shall maintain a log of the date and details of any repairs or maintenance (planned or unplanned) performed on the machine shop baghouses.
[06-096 C.M.R. ch. 115, BPT]

(28) **Parts Washers**

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

- A. FMI 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. FMI shall attach a permanent conspicuous label to each unit summarizing the following operational standards:
 - a. Waste solvent shall be collected and stored in closed containers.
 - b. Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
 - c. Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
 - d. The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
 - e. Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the parts washer.
 - f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the

- parts being cleaned. Air agitated solvent baths may not be used.
- g. Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
 - h. Work area fans shall not blow across the opening of the parts washer unit.
 - 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.
 - 3. Each parts washer shall be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent.
- [06-096 C.M.R. ch. 130]

(29) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a five-minute block average basis.
[06-096 C.M.R. ch. 101, § 3(C)]

(30) **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. 101, § 3(B)(4)]

DONE AND DATED IN AUGUSTA, MAINE THIS 18th DAY OF FEBRUARY, 2021.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for
MELANIE LOYZIM, ACTING COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-262-71-Z-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 1/8/2021

Date of application acceptance: 1/8/2021

Date filed with the Board of Environmental Protection:

This Order prepared by Lynn Muzzey, Bureau of Air Quality.

