



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

**Penobscot Shoe Company
Penobscot County
Old Town, Maine
A-576-71-F-R/M**

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

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

Penobscot Shoe Company (PSC), owned by Phoenix Footwear Group, Inc., has applied to renew their Air Emission License for the operation of emission sources associated with their office and warehouse building. PSC has also applied for a minor revision in order to license the conversion of Boiler #1 from residual fuel to natural gas.

The equipment addressed in this license is located at 107 Main Street, Old Town, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

| <u>Equipment</u> | <u>Max. Capacity</u> | <u>Fuel Type, % sulfur</u> | <u>Maximum Firing Rate</u> | <u>Date of Manuf.</u> | <u>Date of Install.</u> |
|-------------------------|-----------------------------|---------------------------------------|---------------------------------------|----------------------------------|------------------------------------|
| <u>Boiler #1</u> | 4.2 MMBtu/hr | Natural gas, negligible sulfur | 4077 scf/hr | 1963 | 1963 |
| <u>Boiler #2</u> | 6.3 MMBtu/hr | Residual fuel, 2% by weight | 42 gal/hr | 1963 | 1963 |

C. Definitions

Residual Fuel. For the purposes of this license, *residual fuel* is defined as fuel oil meeting the requirements of the following grades of fuel oil as prescribed in ASTM D396: No. 4 (light); No. 4; No.5 (Light); No. 5 (Heavy); and No. 6. [06-096 CMR 106]

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

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

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

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769
(207) 764-0477 FAX: (207) 760-3143

D. Application Classification

The application for PSC does not include the licensing of increased emissions or the installation of new or modified equipment; however, it does include the conversion of Boiler #1 from residual fuel to natural gas. The license is therefore considered to be both a renewal of currently licensed emission units and minor revision, and it has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (CMR) 115 (as amended).

With the annual fuel limit on Boiler #2, the facility is licensed below the major source thresholds for criteria pollutants and is considered a natural minor source. The facility is also licensed below the major source thresholds for hazardous air pollutants (HAP) and is considered an area source of HAP.

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

A. Introduction

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

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

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

B. Boilers #1 and #2

PSC operates Boilers #1 and #2 for office and warehouse heating. The boilers, which fire natural gas and residual fuel, respectively, are rated at 4.2 MMBtu/hr (4,077 scf/hr) and 6.3 MMBtu/hr (42 gal/hr). The boilers were both installed in 1963 and exhaust through a shared stack.

1. BPT Findings

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

Boiler #1: Natural Gas

- PM/PM₁₀ – 0.05 lb/MMBtu based on 06-096 CMR 115, BPT
- SO₂ – 0.6 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98

- NO_x – 100 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98
- CO – 84 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98
- VOC – 5.5 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98
- Visible Emissions – 06-096 CMR 115, BPT

Boiler #2: Residual Fuel

- PM/PM₁₀ – 0.12 lb/MMBtu based on 06-096 CMR 103
- SO₂ – 314 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10 and the combustion of residual fuel with a maximum sulfur content of 2.0% by weight
- NO_x – 55 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
- CO – 5 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
- VOC – 1.13 lb/1000 gal based on AP-42, Table 1.3-3, dated 5/10
- Visible Emissions – 06-096 CMR 101

The BPT emission limits for the boilers are the following:

| <u>Unit</u> | <u>Pollutant</u> | <u>lb/MMBtu</u> |
|-------------|------------------|-----------------|
| Boiler #1 | PM | 0.05 |
| Boiler #2 | PM | 0.12 |

| <u>Unit</u> | <u>PM (lb/hr)</u> | <u>PM₁₀ (lb/hr)</u> | <u>SO₂ (lb/hr)</u> | <u>NO_x (lb/hr)</u> | <u>CO (lb/hr)</u> | <u>VOC (lb/hr)</u> |
|----------------------------|-------------------|--------------------------------|-------------------------------|-------------------------------|-------------------|--------------------|
| Boiler #1 natural gas | 0.21 | 0.21 | 0.01 | 0.41 | 0.34 | 0.02 |
| Boiler #2 residual fuel | 0.76 | 0.76 | 13.19 | 2.31 | 0.21 | 0.05 |

Visible emissions from the combined stack of Boilers #1 and #2 shall not exceed 30% opacity on a six-minute block average basis, except for no more than three six-minute block average in a three-hour period.

Penobscot Shoe shall be limited to the firing of no more than 50,000 gallons of residual fuel in each calendar year. There is no fuel limit on natural gas.

Fuel Sulfur Content Requirements

Boiler #2 is licensed to fire residual fuel. The sulfur content of the residual fuel fired is currently limited to 2.0% by weight per 06-096 CMR 106, *Low Sulfur Fuel*. Per 38 M.R.S.A. §603-A(2)(A)(1) and (2), as of July 1, 2018, no person shall import, distribute, or offer for sale any residual fuel oil with a sulfur content greater than

0.5% by weight. Therefore, beginning July 1, 2018, the residual fuel purchased or otherwise obtained for use in Boiler #2 shall not exceed 0.5% by weight.

2. Periodic Monitoring

Periodic monitoring for Boiler #2 shall include recordkeeping to document fuel use on a calendar year total basis. Documentation shall include the type of fuel used and sulfur content of the fuel.

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

Due to their sizes and years of manufacture, neither boiler is subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 CFR §60.40c]

4. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 CFR Part 63, Subpart JJJJJ

Boiler #2 is subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 CFR Part 63, Subpart JJJJJ. The unit is considered an existing oil boiler rated for a maximum input capacity of less than 10 MMBtu/hr. [40 CFR §63.11193 and §63.11195]

Boiler #1, however, is not subject to 40 CFR Part 63, Subpart JJJJJ because it has been converted to fire natural gas. Gas-fired boilers are exempt from this subpart. If Boiler #1 converts back to firing another applicable fuel (such as residual fuel) in the future, it would become subject as an existing boiler at the time it is converted back to oil. [40 CFR §63.11195]

A summary of the currently applicable federal 40 CFR Part 63, Subpart JJJJJ 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, PSC is still subject to the requirements. Notification forms and additional rule information can be found on the following website: <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.

a. Compliance Dates, Notifications, and Work Practice Requirements

(1) Initial Notification of Compliance

An Initial Notification submittal to EPA was due no later than January 20, 2014. PSC submitted their Initial Notification to EPA on 09/15/2011. [40 CFR Part 63.11225(a)(2)]

(2) Boiler Tune-Up Program

- (i) A boiler tune-up program shall be implemented. [40 CFR §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:

| <u>Boiler Category</u> | <u>Tune-Up Frequency</u> |
|---|--------------------------|
| 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 |

[40 CFR §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 CFR §63.11223(b)(1)]
2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR §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. 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 CFR §63.11223(b)(3)]
4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR §63.11223(b)(4)]
5. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR §63.11223(b)(5)]

6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 CFR §63.11223(b)(7)]

(iv) Tune-Up Report: 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 CFR §63.11223(b)(6)]

(v) After conducting the initial boiler tune-up, a Notification of Compliance Status was required to be submitted to EPA no later than July 19, 2014. [40 CFR §63.11225(a)(4) and 40 CFR §63.11214(b)] PSC submitted their Notification of Compliance Status to EPA on 11/18/2011.

(3) Compliance Report:

A compliance report shall be prepared by March 1st biennially which covers the previous two calendar years. The report shall be maintained by the source 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 CFR §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 CFR §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 40 CFR §§63.11214(d) to conduct a tune-up of each applicable boiler according to 40 CFR §63.11223(b)."

b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63, Subpart JJJJJ including the following [40 CFR §63.11225(c)]:

- (1) Copies of notifications and reports with supporting compliance documentation;
- (2) Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
- (3) Records of the occurrence and duration of each malfunction of each applicable boiler; and
- (4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. [40 CFR §63.11225(a)(4)(vi)]

C. Annual Emissions

1. Total Annual Emissions

PSC shall be restricted to the following annual emissions, on a calendar year basis. The tons per year limits were calculated based on a residual fuel limit of 50,000 gallons for Boiler #2 and 8,760 hours of operation of Boiler #1, firing natural gas:

Total Licensed Annual Emissions for the Facility

Tons/year

(used to calculate the annual license fee)

| | PM | PM₁₀ | SO₂ | NO_x | CO | VOC |
|------------------|------------|------------------------|-----------------------|-----------------------|------------|------------|
| Boiler #1 | 0.9 | 0.9 | 0.1 | 1.8 | 1.5 | 0.1 |
| Boiler #2 | 0.5 | 0.5 | 7.9 | 1.4 | 0.1 | 0.1 |
| Total TPY | 1.4 | 1.4 | 8.0 | 3.2 | 1.6 | 0.2 |

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans*, 40 CFR Part 52, Subpart A, §52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), are

the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO₂e).

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

- the facility's fuel use limit;
- 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 is determined by the Department on a case-by case basis. In accordance with 06-096 CMR 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

| <u>Pollutant</u> | <u>Tons/Year</u> |
|------------------|------------------|
| PM ₁₀ | 25 |
| SO ₂ | 50 |
| NO _x | 50 |
| CO | 250 |

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

ORDER

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

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

The Department hereby grants Air Emission License A-576-71-F-R/M subject to the following conditions.

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

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 CMR 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]

- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license.
[06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
- A. Perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - 1. Within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - 2. Pursuant to any other requirement of this license to perform stack testing.
 - B. Install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - C. Submit a written report to the Department within thirty (30) days from date of test completion.
[06-096 CMR 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- A. Within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 115]

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]

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

(15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

[06-096 CMR 115]

SPECIFIC CONDITIONS

(16) **Boiler #1**

A. PSC shall fire only natural gas in Boiler #1. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

| <u>Emission Unit</u> | <u>Pollutant</u> | <u>lb/MMBtu</u> | <u>Origin and Authority</u> |
|----------------------|------------------|-----------------|-----------------------------|
| Boiler #1 | PM | 0.05 | 06-096 CMR 115, BPT |

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

| <u>Emission Unit</u> | <u>PM (lb/hr)</u> | <u>PM₁₀ (lb/hr)</u> | <u>SO₂ (lb/hr)</u> | <u>NO_x (lb/hr)</u> | <u>CO (lb/hr)</u> | <u>VOC (lb/hr)</u> |
|----------------------|-------------------|--------------------------------|-------------------------------|-------------------------------|-------------------|--------------------|
| Boiler #1 | 0.21 | 0.21 | 0.01 | 0.41 | 0.34 | 0.02 |

(17) **Boiler #2**

A. Fuel

1. Total fuel use for Boiler #2 shall not exceed 50,000 gal/yr of residual fuel, on a calendar year total basis. [06-096 CMR 115, BPT]
2. Prior to July 1, 2018, the facility shall fire residual fuel with a maximum sulfur content not to exceed 2.0% by weight. [06-096 CMR 115, BPT]
3. Beginning July 1, 2018, the facility shall not purchase or otherwise obtain residual fuel with a maximum sulfur content that exceeds 0.5% by weight. [06-096 CMR 115, BPT]
4. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur content of fuel delivered. Records of annual fuel use shall be kept on a calendar year total basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

| <u>Emission Unit</u> | <u>Pollutant</u> | <u>lb/MMBtu</u> | <u>Origin and Authority</u> |
|----------------------|------------------|-----------------|-----------------------------|
| Boiler #2 | PM | 0.12 | 06-096 CMR 103 |

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

| <u>Emission Unit</u> | <u>PM (lb/hr)</u> | <u>PM₁₀ (lb/hr)</u> | <u>SO₂ (lb/hr)</u> | <u>NO_x (lb/hr)</u> | <u>CO (lb/hr)</u> | <u>VOC (lb/hr)</u> |
|----------------------|-------------------|--------------------------------|-------------------------------|-------------------------------|-------------------|--------------------|
| Boiler #2 | 0.76 | 0.76 | 13.19 | 2.31 | 0.21 | 0.05 |

D. Boiler MACT (40 CFR Part 63, Subpart JJJJJ) Requirements for Boiler #2 [incorporated under 06-096 CMR 115, BPT]

1. The facility shall implement a boiler tune-up program. [40 CFR §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:

| <u>Boiler Category</u> | <u>Tune-Up Frequency</u> |
|---|--------------------------|
| 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 |

[40 CFR §63.11223(a) and Table 2]

- 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 CFR §63.11223(b)(1)]
 - (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR §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 CFR §63.11223(b)(3)]
 - (4) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR §63.11223(b)(4)]
 - (5) Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR §63.11223(b)(5)]
 - (6) If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 CFR §63.11223(b)(7)]
- c. Tune-Up Report: 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 CFR §63.11223(b)(6)]

2. Compliance Report

A compliance report shall be prepared by March 1st biennially which covers the previous two calendar years. The report shall be maintained by the source 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 CFR §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 CFR §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 40 CFR §§63.11214(d) to conduct a tune-up of each applicable boiler according to 40 CFR §63.11223(b)."

3. Records shall be maintained consistent with the requirements of 40 CFR Part 63, Subpart JJJJJ including the following [40 CFR §63.11225(c)]:
 - a. Copies of notifications and reports with supporting compliance documentation;
 - b. Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
 - c. Records of the occurrence and duration of each malfunction of each applicable boiler; and
 - d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. [40 CFR §63.11225(a)(4)(vi)]

(18) **Visible Emissions**

Visible emissions from the combined stack of Boilers #1 and #2 shall not exceed 30% opacity on a six-minute block average basis, except for no more than three six-minute block average in a three-hour period. [06-096 CMR 101]

Penobscot Shoe Company
Penobscot County
Old Town, Maine
A-576-71-F-R/M

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Departmental
Findings of Fact and Order
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- (19) PSC shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 22 DAY OF July, 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Come for
PAUL MERCER, COMMISSIONER

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

[Note: If a renewal application, determined as complete by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S.A. §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: 05/31/2016

Date of application acceptance: 06/02/2016

Date filed with the Board of Environmental Protection:

This Order prepared by Colby Fortier-Brown, Bureau of Air Quality.

