



DEPARTMENT ORDER

**New Balance Athletics, Inc.
Somerset County
Skowhegan, Maine
A-1180-71-A-N**

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

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

New Balance Athletics, Inc. (New Balance) is expanding their existing facility, which will increase the total maximum design heat input of all applicable fuel-burning equipment (internal combustion engines equal to or greater than 0.5 MMBtu/hr and all other fuel-burning equipment equal to or greater than 1.0 MMBtu/hr) to above 10.0 MMBtu/hr, which is the threshold for requiring an air emission license under *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115, Section (1)(B)(2)(a). Therefore, New Balance has applied for an Air Emission License for the operation of emission sources associated with their shoe manufacturing facility.

The equipment addressed in this license is located at 17 Walnut Street, Skowhegan, Maine.

B. Title, Right, or Interest

In their application, New Balance submitted a copy of their property deed demonstrating ownership of the facility. New Balance has provided sufficient evidence of title, right, or interest in the facility for purposes of this air emission license.

C. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type	Date of Manuf.	Date of Install.	Stack #
Boiler #1	5.23	37.4 gal/hr	Distillate fuel	1978	1978	1
Boiler #2	5.00	36.1 gal/hr	Distillate fuel	2024	2024	3

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type	Date of Manuf.	Date of Install.	Stack #
Boiler #3	5.00	36.1 gal/hr	Distillate fuel	2024	2024	3
Boiler #4	5.00	36.1 gal/hr	Distillate fuel	2024	2024	3

Stationary Engines

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (kW)	Fuel Type	Firing Rate (gal/hr)	Date of Manuf.	Date of Install.
Generator #1	4.91	500	Distillate fuel	35.8	2024	2024

New Balance may operate small stationary engines smaller than 0.5 MMBtu/hr. These engines are considered insignificant activities and are not required to be included in this license. However, they are still subject to applicable State and Federal regulations. More information regarding requirements for small stationary engines is available on the Department's website at the link below.

<http://www.maine.gov/dep/air/publications/docs/SmallRICEGuidance.pdf>

Additionally, New Balance may operate portable engines used for maintenance or emergency-only purposes. These engines are considered insignificant activities and are not required to be included in this license. However, they may still be subject to applicable State and Federal regulations.

Shoe Manufacturing Equipment

Equipment	Material Process Rate	Finished Material Rate	Stack #
Large Branders (5)	N/A	2,400 pcs ¹ /day/brander	2
Small Branders (4)	N/A	2,400 pcs/day/brander	N/A
Hot-Melt Sprayers (11)	1.25 gal/day	1,200 pcs/day/sprayer	N/A
Pad Printing Machines (12)	0.25 cups/day	600 pcs/day/printer	N/A

D. 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.

¹ pcs = shoe pieces

Portable or Non-Road Engine means an internal combustion engine which is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

An engine is not a non-road (portable) engine if it remains or will remain at a location for more than 12 consecutive months or for a shorter period of time if sited at a seasonal source. A seasonal source is a source that remains in a single location for two years or more and which operates for fewer than 12 months in a calendar year. If an engine operates at a seasonal source for one entire season, the engine does not meet the criteria of a non-road (portable) engine and is subject to applicable stationary engine requirements.

Records or Logs mean either hardcopy or electronic records.

E. 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.

A new source is considered a major source based on whether or not total licensed annual emissions exceed the “Significant Emissions” levels as defined in the Department’s *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100.

Pollutant	Total Licensed Annual Emissions (tpy)	Significant Emission Levels
PM	7.2	100
PM ₁₀	7.2	100
PM _{2.5}	7.2	100
SO ₂	0.1	100
NO _x	13.4	100
CO	3.4	100
VOC	10.0	100

The Department has determined the facility is a minor source, and the application has been processed through 06-096 C.M.R. ch. 115.

F. Facility Classification

With the annual VOC limits associated with the shoe manufacturing, the facility is licensed as follows:

- As a synthetic minor source of air emissions for criteria pollutants, because New Balance is subject to license restrictions that keep facility emissions below major source thresholds for VOC; and
- As an area source of hazardous air pollutants (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. Process Description

New Balance manufactures shoes using a combination of solvent technology and hot melt technology. Solvent technology uses solvent-based cements and cleaners, while hot melt technology reduces the use of solvent-based materials. Hot melt technology involves heating an adhesive to a liquid state before its application. New Balance uses leather etching machines (branders) and pad printing machines to add lettering to various shoe pieces. New Balance does not employ the use of any solvent-based parts cleaners, nor does the facility utilize spray booths in either the solvent or the hot melt application.

Materials from which to make footwear uppers, the part of the shoe above the sole, are received in bulk, then cut and sewn together at numerous pre-fit and sewing stations, producing the uppers for the footwear manufactured at this facility. The uppers are then attached to the soles using solvent based adhesives or hot melt. Additionally, some uppers arrive at the factory completely assembled and ready for attachment to the soles using either hot melt or solvent based adhesives.

Footwear soles are prepped for attachment to the upper of the shoe through a hot melt spraying process. The upper is prepared for attachment to the sole by the application of a

primer or, in the case of the solvent-based process, the application of a solvent-based adhesive.

In the next step of this manufacturing process, uppers, soles, lasts (plastic or wooden forms that footwear is made on), and other components are formed and fitted together to produce finished footwear. First, each upper is made more flexible through heating via a steam conditioner, so that the upper will more readily form to the last and bond to other shoe components. Uppers from the conditioner are placed on the last, where the toes and sides of the shoes are formed and glued to the bottom material using a non-VOC containing hot glue. Excess glue and bunched material is removed from each upper so it will seat correctly on the sole, and the material to be cemented is scuffed for a better bond to the sole.

Next, adhesive is applied to the uppers and allowed to dry. The uppers and soles are then heated to activate the adhesive, after which the soles and uppers are aligned and pressed together. Finally, any touch-up repairs are made before the shoes are inspected and packed.

New Balance continues to look for new products including cements, solvents, and technologies to reduce or eliminate air emissions sources in the shoe manufacturing process.

C. Boilers

New Balance operates Boiler #1 for heat and will be installing Boilers #2, #3, and #4, which will be operated for heat. Boiler #1 is rated at 5.23 MMBtu/hr and fires distillate fuel. Boilers #2, #3, and #4 are each rated at 5.0 MMBtu/hr and fire distillate fuel. Boiler #1 was manufactured and installed in 1978 and exhausts through its own stack, Stack #1. Boilers #2, #3, and #4 were each manufactured in 2024 and will exhaust through a common stack, Stack #3. Boilers #2, #3, and #4 are scheduled to be installed in 2024. Stack #1 has an above-ground-level (AGL) height of 27 ft and an inside diameter of 1.08 ft. Stack #3 has an AGL height of 36 ft and an inside diameter of 1.17 ft.

With limited exceptions, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm) pursuant to 38 M.R.S. § 603-A(2)(A)(3). Therefore, the distillate fuel purchased or otherwise obtained for use in Boilers #1, #2, #3, and #4 shall not exceed 0.0015% by weight (15 ppm).

1. BACT Findings

Following is a BACT analysis for control of emissions from Boilers #1, #2, #3, and #4.

a. Particulate Matter (PM, PM₁₀, PM_{2.5})

New Balance has proposed to burn only low-ash content fuels (distillate fuel) in the boilers. Additional add-on pollution controls are not economically feasible.

BACT for PM/PM₁₀/PM_{2.5} emissions from Boilers #1, #2, #3, and #4 are the emission limits listed in the tables below.

b. Sulfur Dioxide (SO₂)

New Balance has proposed to fire only distillate fuel in Boilers #1, #2, #3, and #4 with a sulfur content not to exceed 0.0015% by weight. The use of this fuel results in minimal emissions of SO₂, and additional add-on pollution controls are not economically feasible.

BACT for SO₂ emissions from Boilers #1, #2, #3, and #4 is the use of ultra-low-sulfur distillate fuel and the emission limits listed in the tables below.

c. Nitrogen Oxides (NO_x)

New Balance considered several control strategies for the control of NO_x including Selective Catalytic Reduction (SCR), Selective Non-Catalytic Reduction (SNCR), water/steam injection, flue gas recirculation (FGR), and low-NO_x burners.

Both SCR and SNCR are technically feasible control technologies for minimizing NO_x. Both methods include injection of a NO_x reducing agent, typically ammonia or urea, into the boiler combustion gases, where the reagent reacts with NO_x to form nitrogen and water. Each technology is effective within a specific temperature range, 500 – 1,200 °F for SCR and 1,400 – 1,600 °F for SNCR. However, both SCR and SNCR have the negative environmental impact of emissions of unreacted ammonia. In addition, due to the initial capital cost and the annual operating costs, these systems are typically only considered cost effective for units larger than Boilers #1, #2, #3, and #4.

Water/steam injection and FGR can attain similar NO_x reduction efficiencies through lowering burner flame temperature and thereby reducing thermal NO_x formation. However, both control strategies reduce the boiler's fuel efficiency.

Boilers #2, #3, and #4 will have low-NO_x burners installed on them. Boiler #1, which is already installed, does not have any pollution control add-ons.

BACT for NO_x emissions from Boilers #2, #3, and #4 is the use low-NO_x burners. BACT for Boilers #1, #2, #3, and #4 is the emission limits listed in the tables below.

d. Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)

New Balance considered several control strategies for the control of CO and VOC including oxidation catalysts and thermal oxidizers.

Oxidation catalysts and thermal oxidizers both have high capital, maintenance, and operational costs considering the size of the boilers in question. These controls were determined to be economically infeasible.

BACT for CO and VOC emissions from Boilers #1, #2, #3, and #4 is the emission limits listed in the tables below.

e. Emission Limits

The BACT emission limits for Boilers #1, #2, #3, and #4 were based on the following:

Distillate Fuel

- PM/PM₁₀/PM_{2.5} – 0.08 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT
- SO₂ – based on firing distillate fuel with a maximum sulfur content of 0.0015% by weight
- NO_x – 20 lb/1,000 gal base on AP-42 Table 1.3-1 dated 5/10
- CO – 5 lb/1,000 gal base on AP-42 Table 1.3-1 dated 5/10
- VOC – 0.2 lb/1,000 gal base on AP-42 Table 1.3-3 dated 5/10
- Visible Emissions – 06-096 C.M.R. ch. 101, § 4(A)(2) and (D)(1)

The BACT emission limits for Boilers #1, #2, #3, and #4 are the following:

Unit	Pollutant	lb/MMBtu
Boiler #1	PM	0.08
Boiler #2	PM	0.08
Boiler #3	PM	0.08
Boiler #4	PM	0.08

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	0.42	0.42	0.42	0.01	0.75	0.19	0.01
Boiler #2	0.40	0.40	0.40	0.01	0.71	0.18	0.01
Boiler #3	0.40	0.40	0.40	0.01	0.71	0.18	0.01
Boiler #4	0.40	0.40	0.40	0.01	0.71	0.18	0.01

2. Visible Emissions

Visible emissions from Stacks #1 and #3 shall not exceed 20% opacity on a six-minute block average basis.

3. Recordkeeping

Documentation shall include the type of fuel used and sulfur content of the fuel.

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

Due to their size, Boilers #1, #2, #3, and #4 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]

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

Boilers #1, #2, #3 and #4 are 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 JJJJJ. Boiler #1 is considered an existing oil boiler less than 10 MMBtu/hr. Boilers #2, #3, and #4 are considered new oil boilers rated less than 10 MMBtu/hr. [40 C.F.R. §§ 63.11193 and 63.11195]

Applicable federal 40 C.F.R. Part 63, Subpart JJJJJ requirements include the following. Additional rule information can be found on the following website: <https://www.epa.gov/stationary-sources-air-pollution/compliance-industrial-commercial-and-institutional-area-source>.

a. Compliance Dates, Notifications, and Work Practice Requirements

(1) Initial Notification of Compliance

An Initial Notification submittal to EPA is due within 120 days after the source becomes subject to the standard. [40 C.F.R. § 63.11225(a)(2)]

(2) Boiler Tune-Up Program

(i) A boiler tune-up program shall be implemented. [40 C.F.R. § 63.11223]

Boilers #2, #3, and #4 are not required to complete an initial performance tune-up, because they are considered new boilers. [40 C.F.R. § 63.11210(g)]

(ii) Tune-ups for all four boilers shall be conducted every two 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. [40 C.F.R. § 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 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. [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) Tune-Up Report: A tune-up report shall be maintained onsite and submitted to the Department and/or EPA upon request. 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 for Boiler #1, a Notification of Compliance Status shall be submitted to EPA within 120 days. [40 C.F.R. § 63.11225(a)(4) and 40 C.F.R. § 63.11214(b)]

(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/or 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)]

- (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."

b. Recordkeeping

- (1) Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJ including the following [40 C.F.R. § 63.11225(c)]:
 - (i) Copies of notifications and reports with supporting compliance documentation;
 - (ii) 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;
 - (iii) Records of the occurrence and duration of each malfunction of each applicable boiler; and
 - (iv) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.
- (2) Records shall be in a form suitable and readily available for expeditious review. Each record must be kept for 5 years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provides access at the site for at least 2 years after the date of each recorded action. The records may be maintained off-site for the remaining 3 years. [40 C.F.R. § 63.11225(d)] Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of Subpart JJJJJ shall be streamlined to the more stringent six-year requirement.

EPA requires submission of Notification of Compliance Status reports for tune-ups through their electronic reporting system. [40 C.F.R. § 63.11225(a)(4)(vi)]

D. Generator #1

New Balance proposes to install an emergency generator, specified as Generator #1. The emergency generator is a generator set consisting of an engine and an electrical generator. The engine, which is rated at 4.91 MMBtu/hr, fires distillate fuel. Generator #1 was manufactured in 2024 and is scheduled to be installed in 2024.

1. BACT Findings

The BACT emission limits for Generator #1 are based on the following:

- PM/PM₁₀/PM_{2.5} – 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 – 3.2 lb/MMBtu from AP-42 Table 3.4-1 dated 10/96
- CO – 0.85 lb/MMBtu from AP-42 Table 3.4-1 dated 10/96
- VOC – 0.09 lb/MMBtu from AP-42 Table 3.4-1 dated 10/96
- Visible Emissions – 06-096 C.M.R. ch. 101, § 4(A)(4)

The BACT emission limits for Generator #1 are the following:

Unit	Pollutant	lb/MMBtu
Generator #1	PM	0.12

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.59	0.59	0.59	0.01	15.71	4.17	0.44

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

BACT for Generator #1 includes recordkeeping of all maintenance conducted on the engine.

2. Chapter 169

Stationary Generators, 06-096 C.M.R. ch. 169 (Chapter 169), is applicable to Generator #1. It is an emergency generator powered by an engine with a rated output of less than 1,000 brake horsepower (747 kW). Chapter 169 identifies emission

standards for generator engines subject to this chapter and stack height requirements for certain generator engines subject to this chapter.

a. Chapter 169 Emission Standards Requirements

For Generator #1, New Balance shall comply with the emission standards for emergency generators by complying with the applicable standards contained in 40 C.F.R. Part 60, Subpart IIII. [06-096 C.M.R. ch. 169, § 4(B)(1)]

b. Chapter 169 Stack Height Requirements

There are no stack height requirements in Chapter 169 applicable to Generator #1 because it exhausts through its own stack and its rated output is less than 1,000 brake horsepower (747 kilowatts). [06-096 C.M.R. ch. 169, § 6]

3. New Source Performance Standards

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII 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 IIII, 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 IIII requirements is listed below.

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 60, Subpart IIII, 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 IIII, 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;
- 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.

[40 C.F.R. §§ 60.4211(f) and 60.4219]

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-Resettable 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. New Balance may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

New Balance shall have available for review by the Department a copy of the manufacturer's emission-related written instructions for engine operation and maintenance. [06-096 C.M.R. ch. 115, BACT]
- (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 IIII for emergency engines. [40 C.F.R. § 60.4214(b)]
- (7) Recordkeeping
New Balance shall keep records that include 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)]

E. Shoe Manufacturing

New Balance operates nine branders, five large branders and four small branders. The branders are operated to etch the brand name into leather pieces for the shoes. Each brander has the capacity to etch 2,400 leather pieces per day. The branders are all enclosed, and the small branders are equipped with high efficiency particulate air (HEPA) filters that exhaust

internally. The large branders have their own ventilation system, which exhausts through Stack #2. Stack #2 has an AGL height of 36 ft and has an inside diameter of 1.33 ft.

New Balance operates eleven hot-melt sprayers. The hot-melt sprayers heat up the adhesive and spray it on to the soles in an automated pattern to attach to the uppers. Each sprayer uses a maximum rate of 1.25 gallons of adhesive per day and has a capacity to spray 1,200 sole pieces per day. The hot-melt sprayers are all equipped with filters.

New Balance operates twelve pad printing machines. The pad printing machines use a bubble which contains the ink to print onto the pad, while a solvent is used at the bottom to clean any additional ink off of the machine. Each pad printing machine uses a maximum rate of 0.25 cups of ink per day and has a capacity to print 600 pad pieces per day.

New Balance emits VOC and HAP as identified in section 112(b) of the Clean Air Act. The majority of VOC and HAP emissions from this facility are generated through the use of adhesives and solvent-based cements and cleaners during the shoe finishing process, which are listed in the table below. New Balance may use additional products for shoe manufacturing in addition to those listed below.

VOC and HAP-Containing Products Used

Product	Density (lb/gal)	VOC Content (%)	HAP Content (%)
Adhesive 1	10.0	6.0	1.0
Curing Agent 1	7.7	77.0	2.0
Primer 1	6.9	31.0	0.0
Pad Printing Inks	8.3	73.5	0.0
Pad Printer Solvent	7.5	100.0	0.0

The leather etching from the branders also generates chromium compounds (Cr) and hexavalent chromium compounds (Cr(VI)), which are HAPs. Estimated emissions per brander are based on worst-case emissions testing on a large brander conducted in 2011 of Cr and Cr(VI), which are 0.10 lb/yr and 0.14 lb/yr, respectively, based on a brander operating limit of 1,040 hr/yr.

New Balance has a potential to emit (PTE) less than 40 tons/year of VOC and is therefore not subject to *VOC RACT*, 06-096 C.M.R. ch. 134. [06-096 C.M.R. ch. 134 (1)(A)(1)]

1. BACT Findings

VOC and HAP

To document emissions of VOC and HAP from the facility, New Balance will continue their recordkeeping program to document material usage, monthly inventory of materials purchased and in-house quantities, and the determination of VOC and HAP emissions on a monthly basis.

The recordkeeping program consists of a solvent-based materials inventory to document the quantity of solvent at the facility. Safety Data Sheet (SDS) data is used to quantify the VOC and HAP content of each substance. All purchases of solvent-based materials are recorded. At the end of each month, an inventory report is generated. Total VOC and HAP usage for each month is then determined from the net gain/loss of solvent in inventory plus the quantity of solvent purchased during the month. Documented off-site disposal of solvent-containing waste may be quantified and subtracted from the total solvent usage.

The implemented work practice standards and continued pursuit of low- or no-VOC releasing technologies and materials represents BPT for VOC and HAP emissions from New Balance. New Balance will practice good housekeeping procedures, such as keeping container lids closed and cleaning accidental spills immediately, to minimize VOC and HAP emissions. New Balance shall continue to seek process modifications which reduce VOC and HAP emissions.

Total facility VOC emissions from New Balance shall not exceed 10.0 tons per year (tpy) on a calendar year basis. Total emissions of HAP shall not exceed 5.0 tpy on a calendar year basis.

Total Chromium Compounds and Hexavalent Chromium

The small branders are equipped with HEPA filters that exhaust internally. The HEPA filters have a removal efficiency of 99.9%. The HEPA filters shall be inspected monthly and replaced as required. All corrective or preventative maintenance performed on the HEPA filters shall be documented in a maintenance log and made available to the Department upon request.

The large branders are equipped with their own ventilation system, which exhausts through Stack #2. The ventilation system shall be inspected monthly. All corrective or preventative maintenance performed on the large branders' ventilation system shall be documented in a maintenance log and made available to the Department upon request.

A diagnostic chromium emissions stack test was performed on Stack #2 (large brander stack) on July 20, 2011, to identify emissions factors of total chromium compounds (Cr) and hexavalent chromium (Cr(VI)) from the branders. The report from this test is in the license record for the facility. The testing was conducted in accordance with 40 C.F.R. Part 63, Appendix A, using Method 306A: *Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations*. This test was done on both pig skin and cow hide samples. The pig skin samples had greater emissions rates than those of cow hide. The greatest emission rates of Cr and Cr(VI) were found to be 1.3×10^{-4} lb/hr and 1.0×10^{-4} lb/hr, respectively, or 6.08×10^{-4} tpy and 4.68×10^{-4} tpy, respectively. The annual worst-case emission rates of Cr and Cr(VI) combined with emissions of HAP from shoe manufacturing are well below the facility-wide HAP limit of 5.0 tpy.

New Balance shall continue to keep records of the branders' hours of operation and use the above emissions rates to estimate Cr and Cr(VI) emissions from the branders, based on the branders' hours of operation. The calculated quantity of Cr and Cr(VI) emissions will be added to the total HAP emissions on a monthly and calendar year basis.

2. Chapter 159

New Balance is subject to *Control of Volatile Organic Compounds from Adhesives and Sealants*, 06-096 C.M.R. ch. 159, because the facility applies adhesives and sealants in their shoe manufacturing operations. [06-096 C.M.R. ch. 159, § 1(A)(1)]

a. Chapter 159 Requirements

- (1) New Balance shall not use any adhesive, sealant, adhesive primer or sealant primer in excess of the following VOC contents per the below table:

Category	VOC content limit (grams VOC per liter)
Adhesives - Contact bond	250
Sealants	420
Adhesive Primers	250
Sealant Primers	750
Adhesives applied to porous material	120

[06-096 C.M.R. ch. 159, § 2(A) and Table 1]

- (2) The VOC content limits for adhesives applied to particular substrates shall apply as follows:
- (1) If New Balance uses an adhesive or sealant subject to a specific VOC content limit for such adhesive or sealant in the table above, such specific limit is applicable rather than an adhesive-to-substrate limit; and
- ii. If an adhesive is used to bond dissimilar substrates together, the applicable substrate category with the highest VOC content shall be the limit for such use.

[06-096 C.M.R. ch. 159, § 2(C)]

- (3) When using a surface preparation or cleanup solvent, New Balance shall:
- i. not use materials for surface preparation containing VOC, unless the VOC content of the surface preparation solvent is less than 70 grams per liter; and

- ii. not use materials containing VOC for the removal of adhesives, sealants, or adhesive or sealant primers from surfaces, other than spray application equipment, unless the composite vapor pressure of the solvent used is less than 45 mm Hg at 20 degrees Celsius.

[06-096 C.M.R. ch. 159, § 2(D)]

- (4) New Balance shall store or dispose of all absorbent materials, such as cloth or paper, which are moistened with adhesives, sealants, primers, or solvents subject to this rule, in non-absorbent containers that shall be closed except when placing materials in or removing materials from the container.

[06-096 C.M.R. ch. 159, § 2(F)]

- (5) New Balance shall not solicit, require the use of, or specify the application of any adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent, or clean-up solvent if such use or application results in a violation of the provisions of this rule. The prohibition of this section shall apply to all written or oral contracts under which any adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent, or clean-up solvent subject to this rule is to be used.

[06-096 C.M.R. ch. 159, § 2(G)]

b. Administrative Requirements

- (1) New Balance shall maintain records demonstrating compliance with this rule, including, but not limited to, the following information:
 - i. A list of each adhesive, sealant, adhesive primer, sealant primer cleanup solvent, and surface preparation solvent in use and in storage;
 - ii. A data sheet or material list which provides the material name, manufacturer identification, and material application;
 - iii. Identification of catalysts, reducers, or other components used in the mix ratio;
 - iv. The VOC content of each product as supplied;
 - v. The final VOC content or vapor pressure, as applied; and

- vi. The annual volume of each adhesive, sealant, adhesive primer, sealant primer, cleanup solvent, or surface preparation solvent used or purchased.

[06-096 C.M.R. ch. 159, § 4(A)]

- (2) All records made to determine compliance with this rule shall be maintained for five (5) years from the date such record is created and shall be made available to the Department within 90 days of a request. [06-096 C.M.R. ch. 159, § 4(C)]
Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of 06-096 C.M.R. ch. 159 shall be streamlined to the more stringent six-year requirement.

F. General Process Emissions

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

G. Fugitive Emissions

New Balance shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

New Balance shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

H. 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 and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on the following assumptions:

- Operating Boilers #1, #2, #3, and #4 for 8,760 hr/yr each;
- Operating Generator #1 for 100 hrs/yr; and
- A VOC and HAP emission limit from shoe manufacturing of 10.0 tpy and 5 tpy, respectively.

This information does not 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	PM _{2.5}	SO ₂	NO _x	CO	VOC	Total HAP
Boiler #1	1.8	1.8	1.8	--	3.3	0.8	--	--
Boiler #2	1.8	1.8	1.8	--	3.1	0.8	--	--
Boiler #3	1.8	1.8	1.8	--	3.1	0.8	--	--
Boiler #4	1.8	1.8	1.8	--	3.1	0.8	--	--
Generator #1	--	--	--	--	0.8	0.2	--	--
Shoe Manufacturing	--	--	--	--	--	--	10.0	5.0
Total TPY	7.2	7.2	7.2	0.1²	13.4	3.4	10.0	5.0

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
PM _{2.5}	15
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.

This determination is based on information provided by the applicant regarding the expected construction and operation of the proposed emission units. If the Department determines that any parameter (e.g., stack size, configuration, flow rate, emission rates, nearby structures, etc.) deviates from what was included in the application, the Department may require New Balance to submit additional information and may require an ambient air quality impact analysis at that time.

² Boilers #1, #2, #3, #4 each have a SO₂ PTE of 0.03 tpy, which adds up to a total of 0.12 tpy.

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-1180-71-A-N subject to the following conditions.

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

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S. § 347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to beginning actual 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, #2, #3, and #4**

A. Fuel

1. Boilers #1, #2, #3, and #4 are licensed to fire distillate fuel. [06-096 C.M.R. ch. 115, BACT]
2. The facility 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, BACT]
3. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, a statement from the supplier that the fuel delivered meets Maine's fuel sulfur content standards, certificate of analysis, or testing of fuel in the tank on-site. [06-096 C.M.R. ch. 115, BACT]

- B. Boilers #2, #3, and #4 shall have low-NO_x burners installed on them. [06-096 C.M.R. ch. 115, BACT]

C. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1	PM	0.08	06-096 C.M.R. ch. 115, BACT
Boiler #2	PM	0.08	06-096 C.M.R. ch. 115, BACT
Boiler #3	PM	0.08	06-096 C.M.R. ch. 115, BACT
Boiler #4	PM	0.08	06-096 C.M.R. ch. 115, BACT

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

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	0.42	0.42	0.42	0.01	0.75	0.19	0.01
Boiler #2	0.40	0.40	0.40	0.01	0.71	0.18	0.01
Boiler #3	0.40	0.40	0.40	0.01	0.71	0.18	0.01
Boiler #4	0.40	0.40	0.40	0.01	0.71	0.18	0.01

- E. Visible emissions from Stacks #1 and #3 shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(2) and (D)(1)]

F. New Balance shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJ applicable to Boilers #1, #2, #3, and #4 including, but not limited to, the following: [incorporated under 06-096 C.M.R. ch. 115, BACT]

1. An Initial Notification submittal to EPA is due within 120 days after the source becomes subject to the standard. [40 C.F.R. § 63.11225(a)(2)]
2. The facility shall implement a boiler tune-up program. [40 C.F.R. § 63.11223]

Boilers #2, #3, and #4 are not required to complete an initial performance tune-up, because they are considered new boilers. [40 C.F.R. § 63.11210(g)]

- a. A tune-up on each boiler shall be conducted every two years. [40 C.F.R. § 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. [40 C.F.R. § 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 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. [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. Tune-Up Report: A tune-up report shall be maintained onsite and submitted to the Department and EPA upon request. 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)]
- d. After conducting the initial boiler tune-up for Boiler #1, a Notification of Compliance Status shall be submitted to EPA. [40 C.F.R. § 63.11225(a)(4) and 40 C.F.R. § 63.11214(b)]

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/or 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."

4. Recordkeeping

- a. Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJ including the following [40 C.F.R. § 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.
- b. Records shall be in a form suitable and readily available for expeditious review. Each record must be kept for 5 years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provides access at the site for at least 2 years after the date of each recorded action. The records may be maintained off-site for the remaining 3 years. [40 C.F.R. § 63.11225(d)] Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of Subpart JJJJJ shall be streamlined to the more stringent six-year requirement.

EPA requires submission of Notification of Compliance Status reports for tune-ups through their electronic reporting system. [40 C.F.R. § 63.11225(a)(4)(vi)]

(18) **Generator #1**

A. New Balance shall keep records of all maintenance conducted on the engine associated with Generator #1. [06-096 C.M.R. ch. 115, BACT]

B. Emissions shall not exceed the following:

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

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

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.59	0.59	0.59	0.01	15.71	4.17	0.44

D. Visible Emissions

Visible emissions from Generator #1 shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(4)]

- E. Generator #1 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 and 06-096 C.M.R. ch. 169]
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 fuel in the tank on-site. [40 C.F.R. § 60.4207(b) and 06-096 C.M.R. ch. 115, BPT]
 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, BPT]
 - b. New Balance shall keep records that include 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. New Balance may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

New Balance shall have available for review by the Department a copy of the manufacturer's emission-related written instructions for engine operation and maintenance. [06-096 C.M.R. ch. 115, BACT]

(19) **Shoe Manufacturing**

- A. The small branders' HEPA filters shall have a removal efficiency of 99.9% and be inspected monthly and replaced as required. All corrective or preventative maintenance performed on the HEPA filters shall be documented in a maintenance log and made available to the Department upon request. [06-096 C.M.R. ch. 115, BACT]
- B. The large branders' ventilation system shall exhaust through Stack #2. The ventilation system shall be inspected monthly. All corrective or preventative maintenance performed on the large branders' ventilation system shall be documented in a maintenance log and made available to the Department upon request. [06-096 C.M.R. ch. 115, BACT]
- C. New Balance shall document usage of VOC- and HAP- containing materials through a monthly inventory of materials purchased, and in-house quantities at the facility on a monthly and calendar year basis. Safety data sheets shall be used to determine product weight percents of VOC and HAP. Total VOC and HAP emissions from shoe manufacturing shall be calculated on a monthly basis by multiplying the product usage in pounds per year by their respective VOC and HAP weight percent. [06-096 C.M.R. ch. 115, BACT]
- D. Emissions of total chromium compounds (Cr) and hexavalent chromium compounds (Cr(VI)) from the branders shall be quantified on a monthly and calendar year basis, based on the branders' hours of operation and leather etching emissions rates of 1.3×10^{-4} lb/hr and 1.0×10^{-4} lb/hr for Cr and Cr(VI), respectively. [06-096 C.M.R. ch. 115, BACT]
- E. Total VOC and HAP emissions shall be reported in tons per year. [06-096 C.M.R. ch. 115, BACT]
- F. Total facility VOC emissions from New Balance shall not exceed 10.0 tons per year (tpy) on a calendar year basis. Total emissions of HAP shall not exceed 5.0 tpy on a calendar year basis. [06-096 C.M.R. ch. 115, BACT]
- G. New Balance shall pursue low- or no-VOC releasing technologies and materials and seek process modifications which reduce VOC and HAP emissions. [06-096 C.M.R. ch. 115, BACT]
- H. New Balance shall keep good housekeeping procedures, which include keeping chemical product containers closed when not in use and cleaning accidental spills immediately. [06-096 C.M.R. ch. 115, BACT]

I. The following standards apply to the chemical products that are applicable sources under 06-096 C.M.R. ch. 159.

1. Chapter 159 Standards

a. New Balance shall not use any adhesive, sealant, adhesive primer or sealant primer within Maine in excess of the following VOC content per Table 1 of 06-096 C.M.R. ch. 159: [06-096 C.M.R. ch. 159, § 2(A) and Table 1]

Category	VOC content limit (grams VOC per liter)
Adhesives - Contact bond	250
Sealants - Other	420
Adhesive Primers - Other	250
Sealant Primers - Other	750
Adhesives applied to porous material	120

b. The VOC content limits for adhesives applied to particular substrates shall apply as follows:

- (1) If New Balance uses an adhesive or sealant subject to a specific VOC content limit for such adhesive or sealant in the table above, such specific limit is applicable rather than an adhesive-to-substrate limit; and
- (2) If an adhesive is used to bond dissimilar substrates together, the applicable substrate category with the highest VOC content shall be the limit for such use.

[06-096 C.M.R. ch. 159, § 2(C)]

c. When using a surface preparation or cleanup solvent, New Balance shall:

- (1) not use materials for surface preparation containing VOC, unless the VOC content of the surface preparation solvent is less than 70 grams per liter; and
- (2) not use materials containing VOC for the removal of adhesives, sealants, or adhesive or sealant primers from surfaces, other than spray application equipment, unless the composite vapor pressure of the solvent used is less than 45 mm Hg at 20 degrees Celsius.

[06-096 C.M.R. ch. 159, § 2(D)]

d. New Balance shall store or dispose of all absorbent materials, such as cloth or paper, which are moistened with adhesives, sealants, primers, or solvents

subject to this rule, in non-absorbent containers that shall be closed except when placing materials in or removing materials from the container.
[06-096 C.M.R. ch. 159, § 2(F)]

- e. New Balance shall not solicit, require the use of, or specify the application of any adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent, or clean-up solvent if such use or application results in a violation of the provisions of this rule. The prohibition of this section shall apply to all written or oral contracts under which any adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent, or clean-up solvent subject to this rule is to be used. [06-096 C.M.R. ch. 159, § 2(G)]

2. Administrative Requirements

- a. New Balance shall maintain records demonstrating compliance with this rule, including, but not limited to, the following information:
 - (1) A list of each adhesive, sealant, adhesive primer, sealant primer cleanup solvent, and surface preparation solvent in use and in storage;
 - (2) A data sheet or material list which provides the material name, manufacturer identification, and material application;
 - (3) Identification of catalysts, reducers, or other components used and the mix ratio;
 - (4) The VOC content of each product as supplied;
 - (5) The final VOC content or vapor pressure, as applied; and
 - (6) The annual volume of each adhesive, sealant, adhesive primer, sealant primer, cleanup solvent, or surface preparation solvent used or purchased.

[06-096 C.M.R. ch. 159, § 4(A)]

- b. All records made to determine compliance with this rule shall be maintained for five (5) years from the date such record is created and shall be made available to the Department within 90 days of a request. [06-096 C.M.R. ch. 159, § 4(C)]
Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of 06-096 C.M.R. ch. 159 is streamlined to the more stringent six-year requirement.

(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. 101, § 4(B)(4)]

(21) Fugitive Emissions

- A. New Balance shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.
- B. New Balance shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

[06-096 C.M.R. ch. 101, § 4(C)]

- (22) If the Department determines that any parameter value pertaining to construction and operation of the emissions units, including but not limited to stack size, configuration, flow rate, emission rates, nearby structures, etc., deviates from what was submitted in the application or ambient air quality impact analysis for this air emission license, New Balance may be required to submit additional information. Upon written request from the Department, New Balance shall provide information necessary to demonstrate AAQS will not be exceeded, potentially including submission of an ambient air quality impact analysis or an application to amend this air emission license to resolve any deficiencies and ensure compliance with AAQS. Submission of this information is due within 60 days of the Department's written request unless otherwise stated in the Department's letter.
[06-096 C.M.R. ch. 115, § 2(O)]

DONE AND DATED IN AUGUSTA, MAINE THIS 4th DAY OF SEPTEMBER, 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____ for
MELANIE LOYZIM, COMMISSIONER

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

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: April 16, 2024

Date of application acceptance: April 19, 2024

Date filed with the Board of Environmental Protection:

This Order prepared by Kendra Nash, Bureau of Air Quality.

