



**DEPARTMENT ORDER**

**UniFirst Corporation  
 Penobscot County  
 Bangor, Maine  
 A-644-71-I-R**

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

**FINDINGS OF FACT**

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

**I. REGISTRATION**

A. Introduction

UniFirst Corporation (UniFirst) has applied to renew their Air Emission License for the operation of emission sources associated with their industrial laundry facility. Additionally, the following changes to the facility are being addressed in this air emission license:

- Adding a new dryer designated as Dryer #4 (below licensing thresholds, so included for completeness purposes only); and
- Removing the parts washer.

The equipment addressed in this license is located at 70 Godsoe Rd, Bangor, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

**Boilers**

<b>Equipment</b>	<b>Max. Capacity (MMBtu/hr)</b>	<b>Maximum Firing Rate</b>	<b>Fuel Type, % sulfur</b>	<b>Date of Manuf.</b>	<b>Date of Install.</b>	<b>Stack #</b>
Boiler #1	8.4	8,220 scf/hr	natural gas, neg.	1979	2011	1
		60 gal/hr	distillate fuel, 0.0015%		1979	
Boiler #2	8.4	8,220 scf/hr	natural gas, neg.	1979	2011	2
		60 gal/hr	distillate fuel, 0.0015%		1979	

**Fuel Burning Process Equipment**

Equipment	Process Rate	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % sulfur	Stack #
Dryer #1	1,400 lb/hr	3.0	2,900 scf/hr	natural gas, neg.	3
Dryer #2	1,400 lb/hr	3.0	2,900 scf/hr	natural gas, neg.	4
Dryer #3	1,400 lb/hr	3.0	2,900 scf/hr	natural gas, neg.	5
Dryer #4 *	240 lb/hr	0.41	407 scf/hr	natural gas, neg.	7
Finishing Tunnel	1,200 garments/hr	1.5	1,470 scf/hr	natural gas, neg.	6

\* Unit is below licensing thresholds and is therefore considered an insignificant activity and mentioned for completeness purposes only.

UniFirst 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, UniFirst 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.

C. Definitions

Shop towel means a piece of fabric or other material that is used in the process of cleaning mechanical parts or devices of general soil, grease, or oil and for general cleaning in the food service industry.

Print towel means a piece of fabric or other material used in the process of cleaning printing or graphic arts equipment, including, but not limited to, printing presses.

Furniture towel means a piece of fabric or other material used in the process of stripping or finishing wood furniture.

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.

Records or Logs mean either hardcopy or electronic records.

#### D. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the date this license was issued.

The application for UniFirst does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of currently licensed emission units only and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

#### E. Facility Classification

With the facility wide VOC limit, the facility is licensed as follows:

- As a synthetic minor source of air emissions for VOC, because UniFirst is subject to license restrictions that keep facility emissions below major source thresholds for criteria pollutants; 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 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. Process Description

General operations at the facility include apparel and other products receiving, sorting, washing, drying, and a variety of pressing, folding, and aggregating steps prior to returning the cleaned products to the customer. UniFirst uses conventional industrial laundry equipment and methods including washing machines and natural gas-fired dryers to launder the apparel, mats, mops, and towels that it rents to customers.

C. Boilers #1 and #2

UniFirst operates Boilers #1 and #2 primarily for facility hot water and heating needs. Boilers #1 and #2 each have a maximum design heat input capacity of 8.4 MMBtu/hr and are dual-firing units as of 2011. Initially, the boilers were manufactured and installed in 1979 to fire distillate fuel. In 2011, the boilers were converted to fire both distillate fuel and natural gas. Boilers #1 and #2 use natural gas as the primary fuel source and distillate fuel as an emergency backup fuel source only. Boilers #1 and #2 each exhaust through Stacks #1 and #2 which are both 30.67 feet above ground level and have an inside diameter of 1.29 feet.

1. BPT Finding

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

Distillate Fuel

PM/PM <sub>10</sub>	–	0.08 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
SO <sub>2</sub>	–	based on firing distillate fuel with a maximum sulfur content of 0.0015% by weight
NO <sub>x</sub>	–	20 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	–	0.34 lb/1000 gal based on AP-42 Table 1.3-3 dated 5/10
Visible Emissions	–	06-096 C.M.R. ch. 101

Natural Gas

PM/PM <sub>10</sub>	–	0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
SO <sub>2</sub>	–	0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
NO <sub>x</sub>	–	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 C.M.R. ch. 101

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

Unit	Pollutant	Fuel	lb/MMBtu
Boiler #1	PM	distillate fuel	0.08
		natural gas	0.05
Boiler #2	PM	distillate fuel	0.08
		natural gas	0.05

Unit	Fuel	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	distillate fuel	1.01	1.01	0.01	1.20	0.30	0.02
	natural gas	0.42	0.42	0.01	0.82	0.69	0.04
Boiler #2	distillate fuel	1.01	1.01	0.01	1.20	0.30	0.02
	natural gas	0.42	0.42	0.01	0.82	0.69	0.04

UniFirst shall be limited to 150,000 gallons of distillate fuel on a calendar year total basis.

2. Visible Emissions

Visible emissions from each boiler shall not exceed 20% opacity on a six-minute block average basis when firing distillate fuel.

Visible emissions from each boiler shall not exceed 10% opacity on a six-minute block average basis when firing natural gas.

3. Periodic Monitoring

Periodic monitoring for Boilers #1 and #2 shall include recordkeeping to document distillate fuel use both on a monthly and calendar year total basis. 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 year of manufacture, Boilers #1 and #2 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 and #2 are not subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*,

40 C.F.R. Part 63, Subpart JJJJJJ as each unit is considered a gas fired boiler. [40 C.F.R. § and 63.11195(e)]

Gas-fired boilers are exempt from 40 C.F.R. Part 63, Subpart JJJJJJ. However, boilers which fire distillate fuel are not. A “gas-fired boiler” is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. [40 C.F.R. § 63.11237]

UniFirst shall only use distillate fuel in Boilers #1 and #2 during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel.

D. Dryers #1-#3 and the Finishing Tunnel

UniFirst operates three industrial laundry dryers, designated Dryers #1, #2, and #3, along with a Finishing Tunnel, all of which fire natural gas.

The dryers are each rated at 3.0 MMBtu/hr and are designed to process 1,400 pounds of laundry per hour. Dryer #1 was manufactured and installed in 2011, Dryer #2 in 2012, and Dryer #3 in 2013. Dryer #1 exhausts through Stack #3, Dryer #2 exhausts through Stack #4, and Dryer #3 exhausts through Stack #5. Stacks #3, #4, and #5 have heights above ground level of 23.5 feet, 24.7 feet, and 24.7 feet, respectively, and each have an inside diameter of 2 feet.

The Finishing Tunnel creates high velocity steam that surrounds the garments as a final step in the laundering process. The Finishing Tunnel has a 1.5 MMBtu/hr natural gas fired burner used for generating steam. The Finishing Tunnel was installed in 2013 and exhausts through Stack #6 which has a height above ground of 24.7 feet and an inside diameter of 2 feet.

1. BPT Findings

The BPT emission limits for Dryers #1 - #3 and the Finishing Tunnel are based on the following:

PM/PM <sub>10</sub>	–	0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
SO <sub>2</sub>	–	0.6 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98
NO <sub>x</sub>	–	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 C.M.R. ch. 115, BPT

The BPT emission limits for the generators are the following:

Unit	Pollutant	lb/MMBtu
Dryer #1	PM	0.05
Dryer #2	PM	0.05
Dryer #3	PM	0.05

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Dryer #1	0.15	0.15	0.01	0.29	0.24	0.02
Dryer #2	0.15	0.15	0.01	0.29	0.24	0.02
Dryer #3	0.15	0.15	0.01	0.29	0.24	0.02
Finishing Tunnel	0.08	0.08	0.01	0.15	0.12	0.01

2. Visible emissions from Dryers #1, #2, #3, and the Finishing Tunnel shall each not exceed 10% opacity on a six-minute block average basis.

3. New Source Performance Standards (NSPS)

Dryers #1, #2, #3, and the Finishing Tunnel each have a heat input capacity of less than 10 MMBtu/hr and are therefore 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. Additionally, Dryers #1, #2, and #3 are not steam generating units. [40 C.F.R. § 60.40c]

4. National Emission Standards for Hazardous Air Pollutants (NESHAP)

Dryers #1, #2, #3, and the Finishing Tunnel are not 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 as the units are not considered boilers. [40 C.F.R. § and 63.11195(e)]

E. Consent Agreement and Final Order

In May 2014, a Consent Agreement and Final Order (CAFO) was signed between the U.S. Environmental Protection Agency (USEPA) and UniFirst. The CAFO addressed the laundering of towels which had the potential to emit significant emissions of VOC. Based on the CAFO, the following requirements shall be included in this air emission license.

1. Prohibition on Laundering Print and Furniture Towels

- a. UniFirst may launder shop towels but shall not launder print or furniture towels (as defined in this air emission license).

- b. UniFirst shall maintain on-site a written standard operating procedure for determining whether a customer is generating shop, print, and/or furniture towels.
    - c. UniFirst shall not retrieve from a customer's location shop, print, or furniture towels that contain free liquids.
2. VOC Emission Cap

Emissions of VOC from all sources on-site must be limited to 10 tpy (12-month rolling total).
3. Shop Towel Throughput Limit

UniFirst's throughput shall be limited to the processing of 2,160,000 pounds of soiled shop towels per year on a 12-month rolling total basis. This throughput limit is based on an emission factor of 8.3 lb VOC per 1,000 pounds of soiled shop towels.
4. Print and Furniture Towel Handling Procedures
  - a. Customers shall be provided with towels to be used as print and furniture towels that are different in color from towels to be used as shop towels. UniFirst shall ask customers to use the appropriate color towel for its intended purpose, as determined for that customer.
  - b. Print and furniture towels received from customers shall be separated from shop and other towels at the customer location, kept in closed containers or sealed bags during transport, and stored in closed containers at UniFirst while awaiting transport to a third-party location for laundering.
5. Pre-Laundering Procedures for Shop Towels
  - a. Soiled shop towels received at UniFirst shall be kept in sealed bags or covered containers until the towels are sorted for washing.
  - b. Sorted shop towels shall be kept in sealed bags or covered containers until the day that they are washed.
6. Shop Towel Washing
  - a. UniFirst must limit the ratio of soiled shop towel load size to manufacturer's rated washer capacity to no more than 1.7 to 1 on a 12-month rolling average.

For example: UniFirst must limit shop towel load size to 1,020 pounds on a 12-month rolling average for a washer with a manufacturer's rated capacity of 600 pounds.



- b. UniFirst must limit the ratio of soiled shop towel load size to manufacturer's rated washer capacity to no more than 2.0 to 1 for any single load.

For example: UniFirst must limit the maximum shop towel load size in any one load to 1,200 pounds for any washer with a manufacturer's rated capacity of 600 pounds.

#### 7. Wastewater

UniFirst shall keep wastewater trenches (beyond the discharge point of the washing machines), settling pits, and equalization tanks covered, except when access is required for activities such as maintenance or sampling.

#### 8. Training

- a. UniFirst shall maintain written standard operating procedures which describe the requirements of the CAFO for plant managers and staff who handle towels.
- b. UniFirst shall maintain written training materials and provide training for all employees who handle shop towels regarding proper procedures for sorting, transporting, receiving, storing, processing, washing, and drying shop towels.
- c. UniFirst shall maintain written training materials and provide training for all employees who handle print and furniture towels regarding proper procedures for sorting, transporting, receiving, and storing print and furniture towels.

#### 9. Recordkeeping

UniFirst (or its Corporate Training Department) shall provide copies of the following records upon request of the Department or EPA:

- a. Definitions of shop, print, and furniture towels and a current written standard operating procedure that UniFirst uses for determining whether a customer is generating shop, print, and/or furniture towels.
- b. Current written standard operating procedures for UniFirst employees and managers who handle or are otherwise responsible for towel sorting and laundering.
- c. Current training materials and records demonstrating that all employees who handle or are otherwise responsible for print, furniture, or shop towels have been trained on standard operating procedures.
- d. Soiled shop towel throughput records, including washer load size records.

F. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a five-minute block average basis.

G. General Process Emissions

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

H. Annual Emissions

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 licensed 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:

- Natural gas combustion in each of the gas-fired units for 8,760 hr/year;
- Firing 150,000 gal/year of distillate fuel; and
- Processing of 2,160,000 lb/year of soiled shop towels and an emission factor of 8.3 lb VOC per 1,000 lb of soiled shop towels.

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 <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Boilers #1 and #2 (natural gas)	3.15	3.15	0.04	6.12	5.14	–
Boilers #1 and #2 (distillate fuel)	1.26	1.26	0.02	1.50	0.38	–
Dryers #1-#3	1.96	1.96	0.02	3.81	3.20	–
Finishing Tunnel	0.33	0.33	neg.	0.64	0.54	–
Facility Wide Limit	–	–	–	–	–	10.0
<b>Total TPY</b>	<b>6.8</b>	<b>6.8</b>	<b>0.1</b>	<b>12.1</b>	<b>9.3</b>	<b>10.0</b>

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

### III. AMBIENT AIR QUALITY ANALYSIS

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

Pollutant	Tons/Year
PM <sub>10</sub>	25
SO <sub>2</sub>	50
NO <sub>x</sub>	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 UniFirst to submit additional information and may require an ambient air quality impact analysis at that time.

### 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-644-71-I-R 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 commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 C.M.R. ch. 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 C.M.R. ch. 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 C.M.R. ch. 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 C.M.R. ch. 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 C.M.R. ch. 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 C.M.R. ch. 115]

- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.  
[06-096 C.M.R. ch. 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department, the licensee shall:
- A. Perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
    - 1. Within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;  
or
    - 2. Pursuant to any other requirement of this license to perform stack testing.
  - B. Install or make provisions to install test ports that meet the criteria of 40 C.F.R. Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
  - C. Submit a written report to the Department within thirty (30) days from date of test completion.  
[06-096 C.M.R. ch. 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- A. Within thirty (30) days following receipt of the written test report by the Department, or another alternative timeframe approved by the Department, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department; and
  - B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

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

## SPECIFIC CONDITIONS

(17) **Boilers #1 and #2**

A. Fuel

1. Boilers #1 and #2 are licensed to fire both natural gas and distillate fuel.  
[06-096 C.M.R. ch. 115, BPT]
2. UniFirst shall only use distillate fuel in Boilers #1 and #2 during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel.  
[40 C.F.R. § 63.11195]
3. Total distillate fuel use for Boilers #1 and #2 shall not exceed 150,000 gal/yr, on a calendar year total basis. [06-096 C.M.R. ch. 115, BPT]
4. 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, BPT]

5. Compliance shall be demonstrated by fuel records showing the quantity, type, and the percent sulfur of the fuel delivered (if applicable). Records of annual fuel use shall be kept on a monthly and calendar year basis. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, certificate of analysis, or testing of the tank containing the fuel to be fired.

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

- B. Emissions shall not exceed the following:

Unit	Pollutant	Fuel	lb/MMBtu	Origin and Authority
Boiler #1	PM	distillate fuel	0.08	06-096 C.M.R. ch. 115, BPT
		natural gas	0.05	
Boiler #1	PM	distillate fuel	0.08	
		natural gas	0.05	

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

Unit	Fuel	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	distillate fuel	1.01	1.01	0.01	1.20	0.30	0.02
	natural gas	0.42	0.42	0.01	0.82	0.69	0.04
Boiler #2	distillate fuel	1.01	1.01	0.01	1.20	0.30	0.02
	natural gas	0.42	0.42	0.01	0.82	0.69	0.04

- D. Visible emissions from each boiler when firing distillate fuel shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(A)(2)]
- E. Visible emissions from each boiler when firing natural gas shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(A)(3)]

(18) **Dryers #1-#3 and Finishing Tunnel**

- A. Dryers #1-#3 and the Finishing Tunnel are licensed to fire natural gas. [06-096 C.M.R. ch. 115, BPT]

- B. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Dryer #1	PM	0.05	06-096 C.M.R. ch. 115, BPT
Dryer #2	PM	0.05	06-096 C.M.R. ch. 115, BPT
Dryer #3	PM	0.05	06-096 C.M.R. ch. 115, BPT

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

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Dryer #1	0.15	0.15	0.01	0.29	0.24	0.02
Dryer #2	0.15	0.15	0.01	0.29	0.24	0.02
Dryer #3	0.15	0.15	0.01	0.29	0.24	0.02
Finishing Tunnel	0.08	0.08	0.01	0.15	0.12	0.01

D. Visible emissions from Dryers #1, #2, #3, and the Finishing Tunnel shall each not exceed 10% opacity on a six-minute block average basis.  
[06-096 C.M.R. ch. 115, BPT]

(19) **VOC and HAP Emissions**

[CAFO Docket No. CAA-01-2014-0011, incorporated under 06-096 C.M.R. ch. 115, BPT]

A. Prohibition on Laundering Print and Furniture Towels

1. UniFirst may launder shop towels but shall not launder print or furniture towels (as defined in this air emission license).
2. UniFirst shall maintain on-site a written standard operating procedure for determining whether a customer is generating shop, print, and/or furniture towels.
3. UniFirst shall not retrieve from a customer's location shop, print, or furniture towels that contain free liquids.

B. VOC Emission Cap

Emissions of VOC from all sources on-site shall not exceed 10.0 tpy (12-month rolling total). Compliance shall be demonstrated by meeting the fuel use limits and shop towel throughput limit contained in this air emission license.

C. Shop Towel Throughput Limit

UniFirst's throughput shall be limited to the processing of 2,160,000 pounds of soiled shop towels per year on a 12-month rolling total. This throughput limit is based on an emission factor of 8.3 lb VOC per 1,000 pounds of soiled shop towels.

D. Print and Furniture Towel Handling Procedures

1. Customers shall be provided with towels to be used as print and furniture towels that are different in color from towels to be used as shop towels. UniFirst shall ask customers to use the appropriate color towel for its intended purpose, as determined for that customer.



2. Print and furniture towels received from customers shall be separated from shop and other towels at the customer location, kept in closed containers or sealed bags during transport, and stored in closed containers at UniFirst while awaiting transport to a third-party location for laundering.

**E. Pre-Laundering Procedures for Shop Towels**

1. Soiled shop towels received at UniFirst shall be kept in sealed bags or covered containers until the towels are sorted for washing.
2. Sorted shop towels shall be kept in sealed bags or covered containers until the day that they are washed.

**F. Shop Towel Washing**

1. UniFirst must limit the ratio of soiled shop towel load size to manufacturer's rated washer capacity to no more than 1.7 to 1 on a 12-month rolling average.

For example: UniFirst must limit shop towel load size to 1,020 pounds on a 12-month rolling average for a washer with a manufacturer's rated capacity of 600 pounds.

2. UniFirst must limit the ratio of soiled shop towel load size to manufacturer's rated washer capacity to no more than 2.0 to 1 for any single load.

For example: UniFirst must limit the maximum shop towel load size in any one load to 1,200 pounds for any washer with a manufacturer's rated capacity of 600 pounds.

**G. Wastewater**

UniFirst shall keep wastewater trenches (beyond the discharge point of the washing machines), settling pits, and equalization tanks covered, except when access is required for activities such as maintenance or sampling.

**H. Training**

1. UniFirst shall maintain written standard operating procedures which describe the requirements of the CAFO for plant managers and staff who handle towels.
2. UniFirst shall maintain written training materials and provide training for all employees who handle shop towels regarding proper procedures for sorting, transporting, receiving, storing, processing, washing, and drying shop towels.
3. UniFirst shall maintain written training materials and provide training for all employees who handle print and furniture towels regarding proper procedures for sorting, transporting, receiving, and storing print and furniture towels.

I. Recordkeeping

UniFirst (or its Corporate Training Department) shall provide copies of the following records upon request of the Department or USEPA:

1. Definitions of shop, print, and furniture towels and a current written standard operating procedure that UniFirst uses for determining whether a customer is generating shop, print, and/or furniture towels.
2. Current written standard operating procedures for UniFirst employees and managers who handle or are otherwise responsible for towel sorting and laundering.
3. Current training materials and records demonstrating that all employees who handle or are otherwise responsible for print, furniture, or shop towels have been trained on standard operating procedures.
4. Soiled shop towel throughput records, including washer load size records.

(20) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a five-minute block average basis.  
[06-096 C.M.R. ch. 115, BPT]

(21) **General Process Sources**

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

- (22) If the Department determines that any parameter value pertaining to construction and operation of the proposed 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, UniFirst may be required to submit additional information. Upon written request from the Department, UniFirst 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 9<sup>th</sup> DAY OF NOVEMBER, 2022.

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: 8/24/22

Date of application acceptance: 8/25/22

Date filed with the Board of Environmental Protection:

This Order prepared by Chris Ham, Bureau of Air Quality.

