



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



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GOVERNOR

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**UniFirst Corporation
Cumberland County
Portland, Maine
A-412-71-I-R/A (SM)**

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

FINDINGS OF FACT

After review of the air emissions 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 Annotated (M.R.S.A.), §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 permitting the operation of emission sources associated with their industrial laundry facility.

UniFirst has also requested an amendment to their license in order to:

1. Replace two existing 400 lb dryers with one new 600 lb dryer, and
2. Incorporate the requirements of a Consent Agreement and Final Order issued by EPA.

The equipment addressed in this license is located at 430 Riverside Industrial Parkway, Portland, Maine

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

<u>Equipment</u>	<u>Maximum Heat Input (MMBtu/hr)</u>	<u>Maximum Firing Rate</u>	<u>Fuel Type, % sulfur</u>	<u>Date of Manuf.</u>
Boiler CB2	20.9	144.1 gal/hr 20,500 scf/hr	fuel oil, 1.5% natural gas, negligible	1979

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

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

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

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

Dryers

<u>Equipment</u>	<u>Maximum Heat Input (MMBtu/hr)</u>	<u>Capacity (lbs)</u>	<u>Fuel Type, % sulfur</u>	<u>Control Equipment</u>	<u>Date of Manuf.</u>	<u>Stack #</u>
Dryer #1*	2.9	600	natural gas, negligible	Lint Filter	2006	2
Dryer #2*	2.7	600	natural gas, negligible	Lint Filter	2014	3

The previous Dryer #3 has been renamed Dryer #1. Dryer #2 replaces two 400 lb dryers (previous Dryers #1 and #2).

Process Equipment

<u>Equipment</u>	<u>Capacity</u>
Parts Washer	15 gallons

UniFirst has other equipment, including space heaters, HVAC units, a steam tunnel, a hot water heater, and Dryer #3 (Milnor Dryer), which are considered insignificant activities due to their size.

C. Application Classification

Although the application for UniFirst includes the installation of new equipment, it does not include the licensing of increased emissions. Therefore, the license is considered to be a renewal with a minor modification and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (CMR) 115 (as amended). With the annual natural gas fuel limit and the throughput limit on processing shop towels, the facility is licensed below the major source thresholds and is considered a synthetic minor and an area source of hazardous air pollutant (HAP).

D. Definitions

The following definitions are used in this air emission license:

“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.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

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

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

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. Boiler CB2

UniFirst operates Boiler CB2 for facility heating and hot water needs. Boiler CB2 is rated at 20.9 MMBtu/hr and primarily fires natural gas. In cases of natural gas curtailment or supply interruption, Boiler CB2 is also equipped to fire fuel oil (either #4 fuel oil or distillate fuel). The boiler was manufactured in 1979 and exhausts through its own stack.

1. BPT Findings

The BPT emission limits for Boiler CB2 were based on the following:

Natural Gas

- PM/PM₁₀ – 0.05 lb/MMBtu based on 06-096 CMR 115, BPT
- SO₂ – 0.6 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98
- NO_x – 100 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98
- CO – 84 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98
- VOC – 5.5 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98
- Opacity – 06-096 CMR 101

Fuel Oil

- PM/PM₁₀ – 0.12 lb/MMBtu based on 06-096 CMR 103
- SO₂ – based on firing #4 fuel oil with a sulfur content of 1.5% by weight
- NO_x – 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
- Opacity – 06-096 CMR 115, BPT

The BPT emission limits for Boiler CB2 are the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>
Boiler CB2 <i>natural gas</i>	PM	0.05
Boiler CB2 <i>fuel oil</i>	PM	0.12

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM₁₀ (lb/hr)</u>	<u>SO₂ (lb/hr)</u>	<u>NO_x (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Boiler CB2 <i>natural gas</i>	1.05	1.05	0.01	2.05	1.72	0.11
Boiler CB2 <i>fuel oil</i>	2.51	2.51	33.94	2.88	0.72	0.05

When firing natural gas, visible emissions from Boiler CB2 shall not exceed 10% opacity on a 6 minute block average, except for no more than one (1) six (6) minute block average in a 3 hour period.

When firing fuel oil, visible emissions from Boiler CB2 shall not exceed 20% opacity on a 6 minute block average, except for no more than two (2) six (6) minute block averages in a 3 hour period.

UniFirst shall be limited to 25.0 million scf/year of natural gas on a 12-month rolling total basis.

Prior to July 1, 2016, or by the date otherwise stated in 38 MRSA §603-A(2)(A)(3), any distillate fuel fired in Boiler CB2 shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). Per 38 MRSA §603-A(2)(A)(3), beginning July 1, 2016, or on the date specified in the statute, the facility shall fire distillate fuel with a maximum sulfur content limit of 0.005% by weight (50 ppm), and beginning January 1, 2018, or on the date specified in the statute, the facility shall fire distillate fuel with a maximum sulfur content limit of 0.0015% by weight (15 ppm). The specific dates contained in this paragraph reflect the current dates in the statute as of the effective date of this license; however, if the statute is revised, the facility shall comply with the revised dates upon promulgation of the statute revision.

Prior to January 1, 2018, or by the date otherwise stated in 38 MRSA §603-A(2)(A)(1) and (2), any #4 fuel oil fired in Boiler CB2 shall have a maximum sulfur content of 1.5% by weight. Per 38 MRSA §603-A(2)(A)(1) and (2), beginning January 1, 2018, or on the date specified in the statute, the facility shall fire #4 fuel oil with a maximum sulfur content limit of 0.5% by weight. The specific dates contained in this paragraph reflect the current dates in the statute as of the effective date of this license; however, if the statute is revised, the facility shall comply with the revised dates upon promulgation of the statute revision.

2. Periodic Monitoring

Periodic monitoring for the boiler shall include recordkeeping to document fuel use both on a monthly and 12 month rolling total basis. Documentation shall include the type of fuel used and sulfur content of the fuel, if applicable.

3. 40 CFR Part 60, Subpart Dc

Due to the year of manufacture, Boiler CB2 is not subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

4. 40 CFR Part 63 Subpart JJJJJ

Gas-fired boilers are exempt from *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ). However, boilers which fire fuel oil 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 CFR Part 63.11237]

UniFirst intends to operate Boiler CB2 within the definition of a “gas-fired boiler” and is therefore exempt from the requirements of Subpart JJJJJJ. If Boiler CB2 fires another fuel (such as distillate fuel or #4 fuel oil) beyond the limitations of the definition of a “gas-fired boiler”, it will become subject to Subpart JJJJJJ as an existing boiler at the time it is converted back to oil. UniFirst shall not convert Boiler CB2 to oil firing (beyond what is included in the definition of a “gas-fired boiler”) without first amending their license to address oil firing. There is no restriction on oil firing during periods of natural gas curtailment or supply interruption, and the license does not need to be amended for oil firing under such conditions.

D. Dryers

UniFirst operates two natural gas-fired dryers in their laundering process that are above the insignificance threshold. Dryers #1 and #2 have maximum heat inputs of 2.9 MMBtu/hr and 2.7 MMBtu/hr respectively. Both dryers have a nominal capacity of 600 lb. The dryers vent through lint filters to reduce emissions of PM.

The BACT/BPT combustion related emission limits for the dryers were based on the following:

Natural Gas

- PM/PM₁₀ – 0.05 lb/MMBtu based on 06-096 CMR 115, BPT
- SO₂ – 0.6 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98
- NO_x – 100 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98
- CO – 84 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98
- VOC – 5.5 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98
- Opacity – 06-096 CMR 115, BACT/BPT

The BACT/BPT combustion related emission limits for the dryers are the following:

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM₁₀ (lb/hr)</u>	<u>SO₂ (lb/hr)</u>	<u>NO_x (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Dryer #1	0.15	0.15	neg	0.29	0.24	0.02
Dryer #2	0.14	0.14	neg	0.26	0.22	0.01

Visible emissions from Dryers #1 and #2 shall each not exceed 10% opacity on a 6 minute block average, except for no more than one (1) six (6) minute block average in a 3 hour period.

Fuel use from the dryers shall be included in the facility-wide natural gas limit of 25.0 million scf/year.

E. VOC and HAP Emissions from Shop Towels

UniFirst operates a commercial laundry that handles, among other items, shop towels. At the request of the U.S. Environmental Protection Agency (USEPA), UniFirst performed emissions testing in December 2012. The results from this testing have been used to establish site-specific emission factors for the laundering of shop towels and facility-wide VOC and HAP emission limits.

General operations at UniFirst include receiving, sorting, washing, and drying as well as treatment of the wastewater produced. Some of these operations are point sources of emissions while others are fugitive emission sources. UniFirst developed VOC and HAP (both total and highest single) emission factors for shop towels that encompass emissions from all steps of the laundering process. The highest single HAP emission factor is for tetrachloroethylene. The emission factors are as follows:

VOC	0.0083 lb/lb soiled shop towels
Total HAP	0.0015 lb/lb soiled shop towels
Single HAP	0.00080 lb/lb soiled shop towels

BPT for the laundering of shop towels has been determined to be an annual throughput limit of 2,160,000 lbs of soiled shop towels. This limit corresponds to the following annual emissions:

VOC	9.0 tpy
Total HAP	1.6 tpy
Single HAP	0.9 tpy

F. 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, UniFirst has requested that the following requirements be added to their air emission license.

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 must be limited to 10 tpy (12-month rolling total).

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 basis. 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

No later than November 17, 2014, 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 this Section H 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 EPA:

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.

G. Parts Washer

UniFirst operates a parts washer subject to *Solvent Cleaners*, 06-096 CMR 130 (as amended) and records shall be kept documenting compliance.

H. Annual Emissions

1. Total Annual Emissions

UniFirst shall be restricted to the following annual emissions, based on a 12 month rolling total. The tons per year limits were calculated based on the following:

- Firing 25.0 million scf/year of natural gas
- 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

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

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC	HAP (Single/Total)
Natural Gas	0.6	0.6	–	1.3	1.1	–	–
Shop Towels	–	–	–	–	–	–	0.9/1.6
Facility Wide Limit	–	–	–	–	–	10.0	–
Total TPY	0.6	0.6	–	1.3	1.1	10.0	0.9/1.6

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through ‘Tailoring’ revisions made to EPA’s *Approval and Promulgation of Implementation Plans*, 40 CFR Part 52, Subpart A, §52.21 Prevention of Significant Deterioration of Air Quality rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), are the aggregate group of the following gases: Carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO₂e).

Based on the facility’s fuel use limit(s), the worst case emission factors from AP-42, IPCC (Intergovernmental Panel on Climate Change), and *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98, and the global warming potentials contained in 40 CFR Part 98, UniFirst is below the major source threshold of 100,000 tons of CO₂e per year. Therefore, no additional licensing requirements are needed to address GHG emissions at this time.

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source shall be determined by the Department on a case-by case basis. In accordance with 06-096 CMR 115, an ambient air quality impact analysis is not required for a minor source if the total

licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

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

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

ORDER

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

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

The Department hereby grants Air Emission License A-412-71-I-R/A subject to the following conditions.

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

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115.
[06-096 CMR 115]

- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that

equipment may be operating out of compliance with emission standards or license conditions; or

2. pursuant to any other requirement of this license to perform stack testing.
- B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
- C. submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 115]

- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

- A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
- B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
- C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 115]

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

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

- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample

such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.
[06-096 CMR 115]

SPECIFIC CONDITIONS

(16) Boiler CB2

A. Fuel

1. Boiler CB2 is licensed to fire natural gas. The natural gas fired in Boiler CB2 shall be included in the facility-wide natural gas limit. [06-096 CMR 115, BPT]
2. Boiler CB2 is licensed to fire fuel oil (either #4 fuel oil or distillate fuel) within the confines of the definition of a "gas-fired boiler" as defined by 40 CFR 63.11237. UniFirst shall keep records of all oil firing including dates, duration, and reason for operating Boiler CB2 on oil. [06-096 CMR 115, BPT]
3. Prior to July 1, 2016 or the date specified in 38 MRSA §603-A(2)(A)(3), any distillate fuel fired in Boiler CB2 shall be ASTM D396 compliant (max. sulfur content of 0.5% by weight). [06-096 CMR 115, BPT]
4. Beginning July 1, 2016 or on the date specified in 38 MRSA §603-A(2)(A)(3), the facility shall fire distillate fuel with a maximum sulfur content limit of 0.005% by weight (50 ppm). [38 MRSA §603-A(2)(A)(3)]
5. Beginning January 1, 2018 or on the date specified in 38 MRSA §603-A(2)(A)(3), the facility shall fire distillate fuel with a maximum sulfur content limit of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]
6. Prior to January 1, 2018 or the date specified in 38 MRSA §603-A(2)(A)(1) and (2), any #4 fuel oil fired in Boiler CB2 shall have a maximum sulfur content of 1.5% by weight. [06-096 CMR 115, BPT]
7. Beginning January 1, 2018 or on the date specified in statute, the facility shall fire #4 fuel oil with a maximum sulfur content limit of 0.5% by weight. [38 MRSA §603-A(2)(A)(1) and (2)]
8. Compliance shall be demonstrated by fuel records from the supplier 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 12-month rolling total basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler CB2 <i>natural gas</i>	PM	0.05	06-096 CMR 115, BPT
Boiler CB2 <i>fuel oil</i>	PM	0.12	06-096 CMR 103§(2)(B)(1)(a)

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

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler CB2 <i>natural gas</i>	1.05	1.05	0.01	2.05	1.72	0.11
Boiler CB2 <i>fuel oil</i>	2.51	2.51	33.94	2.88	0.72	0.05

D. Visible Emissions

1. When firing natural gas, visible emissions from Boiler CB2 shall not exceed 10% opacity on a 6 minute block average, except for no more than one (1) six (6) minute block average in a 3 hour period. [06-096 CMR 101]
2. When firing fuel oil, visible emissions from Boiler CB2 shall not exceed 20% opacity on a 6 minute block average, except for no more than two (2) six (6) minute block averages in a 3 hour period. [06-096 CMR 115, BPT]

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

- A. Dryers #1 and #2 are licensed to fire natural gas. The natural gas fired in Dryers #1 and #2 shall be included in the facility-wide natural gas limit. [06-096 CMR 115, BACT/BPT]
- B. Emissions from the combustion of natural gas shall not exceed the following [06-096 CMR 115, BACT/BPT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Dryer #1	0.15	0.15	neg	0.29	0.24	0.02
Dryer #2	0.14	0.14	neg	0.26	0.22	0.01

- C. Visible emissions from Dryers #1 and #2 shall each not exceed 10% opacity on a 6 minute block average basis, except for no more than one (1) six (6) minute block average in a 3 hour period. [06-096 CMR 115, BACT/BPT]

(18) **Facility-Wide Fuel Limit**

UniFirst shall not exceed a facility-wide usage of 25,000,000 scf per year of natural gas based on a 12-month rolling total. Compliance shall be demonstrated by fuel receipts and/or records from the supplier (or fuel flow meters) showing the quantity of the fuel delivered (or used). Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis. [06-096 CMR 115, BPT]

(19) **VOC and HAP Emissions**

[CAFO Docket No. CAA-01-2014-0011]

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

No later than November 17, 2014 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 this Section H 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) **Parts Washer**

Parts washers at UniFirst are subject to *Solvent Cleaners*, 06-096 CMR 130 (as amended).

- A. UniFirst shall keep records of the amount of solvent added to each parts washer. [06-096 CMR 115, BPT]
- B. The following are exempt from the requirements of 06-096 CMR 130 [06-096 CMR 130]:
 1. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
 2. Wipe cleaning; and,
 3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.
- C. The following standards apply to cold cleaning machines that are applicable sources under Chapter 130.
 1. UniFirst shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 CMR 130]:
 - (i) Waste solvent shall be collected and stored in closed containers.
 - (ii) Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
 - (iii) Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
 - (iv) The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
 - (v) Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the degreaser.
 - (vi) When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
 - (vii) Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
 - (viii) Work area fans shall not blow across the opening of the degreaser unit.
 - (ix) The solvent level shall not exceed the fill line.
 2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches. [06-096 CMR 130]

UniFirst Corporation
Cumberland County
Portland, Maine
A-412-71-I-R/A (SM)

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Departmental
Findings of Fact and Order
Air Emission License
Renewal with Amendment

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

DONE AND DATED IN AUGUSTA, MAINE THIS 4 DAY OF November, 2014.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Corne for
PATRICIA W. AHO, COMMISSIONER

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

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 9/4/14

Date of application acceptance: 9/5/14

Date filed with the Board of Environmental Protection:

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

