



DEPARTMENT ORDER

**UniFirst Corporation
 Cumberland County
 Portland, Maine
 A-412-71-J-R/A**

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

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

UniFirst Corporation (UniFirst) has applied to renew their Air Emission License for the operation of emission sources associated with their industrial laundry facility. UniFirst has also requested a minor amendment to their license in order to remove a 15-gallon parts washer and remove the fuel limit.

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

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type	Date of Manuf.	Stack #
Boiler CB2	20.9	20,500 scf/hr	Natural Gas	1979	1
		144.1 gal/hr	#4 Fuel Oil or Distillate Fuel		

Stationary Engines

Equipment	Max. Input Capacity (MMBtu/hr)	Firing Rate (scf/hr)	Fuel Type	Capacity (lbs)	Date of Manuf.	Stack #
Dryer #1	2.9	2,900	Natural Gas	600	2006	2
Dryer #2	2.7	2,700	Natural Gas	600	2014	3

Process Equipment

Equipment	Capacity
<i>Parts Washer *</i>	<i>15 gallons</i>

* Removed from license

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 heat input capacities and are mentioned for completeness only.

C. Definitions

Distillate Fuel means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

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

Industrial Cleaning Solvents means products containing VOC when used for cleaning activities applied to items and surfaces used in manufacturing, processing, mining, and refining or other manufacturing activities.

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.

Records or Logs mean either hardcopy or electronic records.

Residual Fuel means any fuel meeting the requirements of the following grades of fuel oil as prescribed in ASTM D396: No. 4 (light); No. 4; No.5 (light); No. 5 (heavy); and No. 6.

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.

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.

UniFirst has applied to renew currently licensed emission units as well as modify their license as addressed in Section I(A) above.

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

Pollutant	Current License (tpy)	Future License (tpy)	Net Change (tpy)	Significant Emissions Levels
PM	0.6	5.8	+5.2	100
PM ₁₀	0.6	5.8	+5.2	100
PM _{2.5}	-	5.8	-	100
SO ₂	-	-	-	100
NO _x	1.3	11.3	+10.0	100
CO	1.1	9.5	+8.4	100
VOC	10	10	-	50*

* UniFirst is located in an area of the state included in the Ozone Transport Region. Therefore, the significant emission level for VOC is 50 tpy.

Therefore, this license is considered to be both a renewal and a minor modification 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 shop towel processing limits, the facility is licensed as follows:

- As a synthetic minor source of air emissions for criteria pollutants, because UniFirst 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 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

UniFirst's industrial laundry processes include several emissions units. General operations at UniFirst include receiving, sorting, washing, and drying of apparel and other products as well as a variety of pressing, folding, and aggregating 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 or distillate fuel). The boiler was manufactured in 1979 and exhausts through its own stack, Stack #1.

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 Boiler CB2 shall not exceed 0.0015% by weight (15 ppm).

With limited exceptions, no person shall import, distribute, or offer for sale any residual fuel oil with a sulfur content greater than 0.5% by weight pursuant to 38 M.R.S. §§ 603-A(2)(A)(1) and (2). Therefore, the residual fuel purchased or otherwise obtained for use in Boiler CB2 shall not exceed 0.5% by weight.

1. BPT Findings

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

Fuel Oil

- | | |
|--|---|
| PM/PM ₁₀ /PM _{2.5} | - 0.12 lb/MMBtu, 06-096 C.M.R. ch. 103 |
| SO ₂ | - based on firing residual fuel with a maximum sulfur content of 0.5% by weight |
| NO _x | - 20 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10 |
| CO | - 5 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10 |
| VOC | - 0.2 lb/1,000 gal based on AP-42 Table 1.3-3 dated 5/10 |
| Visible Emissions | - 06-096 C.M.R. ch. 101 |

Natural Gas

- PM/PM₁₀/PM_{2.5} – 0.05 lb/MMBtu, 06-096 C.M.R. ch. 115, BPT
- SO₂ – 0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
- NO_x – 100 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
- CO – 84 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
- VOC – 5.5 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
- Visible Emissions – 06-096 C.M.R. ch. 101

The BPT emission limits for Boiler CB2 are the following:

Unit	Fuel Type	Pollutant	lb/MMBtu
Boiler CB2	Natural Gas	PM	0.05
	Fuel Oil	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)
Boiler CB2 <i>Natural Gas</i>	1.67	1.67	1.67	0.01	2.03	1.70	0.11
Boiler CB2 <i>Fuel Oil</i>	2.51	2.51	2.51	10.52	2.99	0.75	0.03

2. Visible Emissions

When firing natural gas, visible emissions from Boiler CB2 shall not exceed 10% opacity on a six-minute block average basis.

When firing either distillate fuel or #4 fuel oil, visible emissions from Boiler CB2 shall not exceed 20% opacity on a six-minute block average basis.

3. Periodic Monitoring

Periodic monitoring for Boiler CB2 shall include recordkeeping to document fuel use both on a monthly and calendar year basis. Documentation shall include the type of fuel used and sulfur content of the fuel, as applicable.

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

Due to the year of manufacture, Boiler CB2 is 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

Boiler CB2 is 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. Natural gas-fired units are exempt from the requirements of this regulation. [40 C.F.R. §§ 63.11195(e)]

Gas-fired boilers are exempt from 40 C.F.R. 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 C.F.R. § 63.11237]

In order to maintain the classification of gas-fired boiler pursuant to Subpart JJJJJ, UniFirst may only fire fuel oil in Boiler CB2 during periods of gas curtailment or supply interruption (as defined in 40 C.F.R. § 63.11237 “Period of gas curtailment or supply interruption”), startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

Any boiler designed to burn fuels besides gaseous fuels prior to June 4, 2010, is considered an existing boiler under this rule. A boiler which currently fires gaseous fuels but converts back to firing another fuel (such as distillate fuel) in the future would become subject as an existing boiler at the time it is converted back to oil.

D. Dryers

UniFirst operates two natural gas-fired dryers in their laundering process that are above the insignificant 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 lbs. The dryers vent through lint filters to reduce emissions of PM.

1. BPT Findings

The BPT combustion related emission limits for Dryers #1 and #2 were based on the following:

Natural Gas

PM/PM ₁₀ /PM _{2.5}	–	0.05 lb/MMBtu, 06-096 C.M.R. ch. 115, BPT
SO ₂	–	0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
NO _x	–	100 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
CO	–	84 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
VOC	–	5.5 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
Visible Emissions	–	06-096 C.M.R. ch. 115, BPT

The BPT combustion related emission limits for Dryers #1 and #2 are the following:

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)
Dryer #1	0.15	0.15	0.15	-	0.28	0.24	0.02
Dryer #2	0.14	0.14	0.14	-	0.26	0.22	0.01

2. Visible Emissions

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

E. VOC and HAP Emissions from Shop Towels

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

Some of the operations, including receiving, sorting, washing, and drying as well as treatment of the wastewater produced, 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 (tetrachloroethylene)	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 ton/yr
Total HAP	1.6 ton/yr
Single HAP	0.9 ton/yr

F. Consent Agreement and Final Order

In May 2014, a Consent Agreement and Final Order (CAFO) was signed between the 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.

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 (SOP) for the determination whether a customer is generating shop, print, and/or furniture towels.
- c. UniFirst shall not retrieve from a customer's location any 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 tons/yr on a 12-month rolling total basis.

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 lb 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 purposes, as determined for that customer.
- b. Print and furniture towels received from the 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 SOPs which describe the requirements of this Section 8 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 of 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 of 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 SOP that UniFirst uses for determining whether a customer is generating shop, print, and/or furniture towels.
- b. Current written SOPs 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 SOPs.
- d. Soiled shop towel throughput records, including washer load size records.

G. General Process Emissions

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

H. Fugitive Emissions

UniFirst 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.

UniFirst 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.

I. 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 firing natural gas in Dryer #1, Dryer #2, and Boiler CB2 for 8,760 hours each and processing of 2,160,000 lb/year of soiled shop towels with 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 ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC	HAP (Single/Total)
Boiler CB2	4.6	4.6	4.6	-	8.9	7.5	-	-
Dryer #1	0.6	0.6	0.6	-	1.2	1.0	-	
Dryer #2	0.6	0.6	0.6	-	1.2	1.0	-	
Shop Towels	-	-	-	-	-	-	-	0.9/1.6
Facility Wide Limit	-	-	-	-	-	-	10.0	-
Total TPY	5.8	5.8	5.8	-	11.3	9.5	10.0	0.9/1.6

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 licensed 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-412-71-J-R/M subject to the following conditions.

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

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S. § 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] Payment of the annual air emission license fee for UniFirst is due by the end of August of each year. [38 M.R.S. § 353-A(3)]
- (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]

SPECIFIC CONDITIONS

(17) **Boiler CB2**

A. Fuel

1. Boiler CB2 is licensed to fire natural gas. [06-096 C.M.R. ch. 115, BPT]
2. Boiler CB2 is also 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 C.F.R. § 63.11237. UniFirst shall keep records of all oil firing including dates, duration, and reason for operating Boiler CB2 on oil. [06-096 C.M.R. ch. 115, BPT]
3. 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]

4. The facility shall not purchase or otherwise obtain #4 fuel oil with a maximum sulfur content that exceeds 0.5% by weight. [06-096 C.M.R. ch. 115, BPT]
5. Compliance shall be demonstrated by fuel records showing the quantity, type, and 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. 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, 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 C.M.R. ch. 115, BPT
Boiler CB2 <i>Fuel oil</i>	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, BPT/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 CB2 <i>Natural Gas</i>	1.67	1.67	1.67	0.01	2.03	1.70	0.11
Boiler CB2 <i>Fuel Oil</i>	2.51	2.51	2.51	10.52	2.99	0.75	0.03

D. Visible Emissions

1. During periods of time when only natural gas is fired in Boiler CB2, visible emissions shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(3)]
2. During periods of time when only fuel oil (#4 fuel oil or distillate fuel) is fired in Boiler CB2, visible emissions shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, §§ 4(A)(1)(a)(i) and 4(A)(2)]

E. Operational Limitation

UniFirst may only fire fuel oil in Boiler CB2 during periods of gas curtailment or supply interruption (as defined in 40 C.F.R. § 63.11237 “Period of gas curtailment or supply interruption”), startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year. [06-096 C.M.R. ch. 115, BPT]

(18) **Dryer #1 and #2**

- A. Dryers #1 and #2 are licensed to fire natural gas. [06-096 C.M.R. ch. 115, BPT]
- B. Emissions from the combustion of natural gas shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

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)
Dryer #1	0.15	0.15	0.15	-	0.28	0.24	0.02
Dryer #2	0.14	0.14	0.14	-	0.26	0.22	0.01

- C. Visible emissions from Dryers #1 and #2 shall 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]

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 SOP 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 ton/year (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 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 containers until the day that they are washed.

F. Shop Towel Washing

1. UniFirst must limit the ratio of soiled shop towel load sizes to the 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 sizes to the 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 SOPs 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 SOP that UniFirst uses for determining whether a customer is generating shop, print, and/or furniture towels.
2. Current written SOPs 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 SOPs.
4. Soiled shop towel throughput records, including washer load size records.

(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. UniFirst 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. UniFirst 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, 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 22nd DAY OF DECEMBER, 2025.

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: August 2, 2024

Date of application acceptance: August 5, 2024

This Order prepared by Zac Hicks, Bureau of Air Quality.