



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

**Cintas Corporation
Cumberland County
Westbrook, Maine
A-999-71-B-N/A (SM)**

**Departmental
Findings of Fact and Order
Air Emission License
Renewal/Amendment
After-the Fact**

FINDINGS OF FACT

After review of the air emissions 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 Annotated (M.R.S.A.), §344 and §590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

1. The Air Emission License for Cintas Corporation (Cintas) expired on February 5, 2014. Cintas applied, on June 1, 2014, to renew their expired license permitting the operation of emission sources associated with their industrial laundry facility.
2. Cintas has also requested an amendment to their license to specifically address VOC and HAP emissions from the laundering of shop towels.
3. The equipment addressed in this license is located at 88 Spiller Drive, Westbrook, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Date of Manuf.</u>	<u>Stack #</u>
Boiler	10.46	8,235	Natural Gas	2006	1

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

Process Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (scf/hr)</u>	<u>Fuel Type, % Sulfur</u>	<u>Stack #</u>
Dryer 1	1.4	1,360	Natural Gas, Neg.	2
Dryer 2	1.4	1,360	Natural Gas, Neg.	3
Dryer 3	1.4	1,360	Natural Gas, Neg.	4
Dryer 4	1.4	1,360	Natural Gas, Neg.	5
Steam Tunnel	1.4	1,471	Natural Gas, Neg.	Steam Tunnel
HVAC 1*	0.7		Natural Gas, Neg.	7
HVAC 2*	0.4		Natural Gas, Neg.	8
HVAC 3*	0.4		Natural Gas, Neg.	9
HVAC 4*	0.4		Natural Gas, Neg.	10
HVAC 5*	0.4		Natural Gas, Neg.	11

* Insignificant activities as defined in 06-096 CMR 115.

C. Application Classification

The application for Cintas 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 an expired license and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (CMR) 115 (as amended).

The previous air emission license for Cintas expired on February 5, 2014. A complete application was not submitted prior to the expiration date, therefore Cintas is considered to be an existing source applying for an after-the-fact renewal. The Department has determined the facility is a minor source and the application has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended).

With the annual limit on shop towel laundering, the facility is licensed below the major source thresholds for criteria pollutants and is considered a synthetic minor. With the annual limit on shop towel laundering, the facility is licensed below the major source thresholds for hazardous air pollutants (HAP) and is considered an area source of HAP.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

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

BPT for an after-the-fact renewal requires an analysis similar to a Best Available Control Technology analysis per 06-096 CMR 115 (as amended).

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

Cintas designs, manufactures and implements corporate uniform programs, and provides entrance mats, restroom supplies, promotional products, first aid and safety products, fire protection services and document management services to businesses of all types.

In the laundry process, a variety of chemicals are used, including detergent, water conditioner and alkali to clean the clothes, and flocculent, coagulant and clay to clean waste water.

C. Boiler

Cintas operates a 10.46 MMBtu/hr, natural gas fired boiler. The boiler was manufactured in 2006 and installed in 2007, and exhausts through Stack #1.

Due to its size and year of manufacture, the boiler is subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

BACT/BPT Findings

The BACT/BPT emission limits for the Boiler firing natural gas were based on the following:

- PM/PM₁₀ – 0.05 lb/MMBtu based on 06-096 CMR 115, BPT/BACT
- 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

The BACT/BPT emission limits for the boiler are the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>
Boiler	PM	0.05

<u>Unit</u>	<u>PM</u> <u>(lb/hr)</u>	<u>PM₁₀</u> <u>(lb/hr)</u>	<u>SO₂</u> <u>(lb/hr)</u>	<u>NO_x</u> <u>(lb/hr)</u>	<u>CO</u> <u>(lb/hr)</u>	<u>VOC</u> <u>(lb/hr)</u>
Boiler	0.52	0.52	0.01	1.02	0.85	0.06

Visible emissions from the boiler shall not exceed 10% opacity on a six 6 minute block average, except for no more than one (1) six (6) minute block average in a three (3) hour period.

Periodic Monitoring

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

40 CFR Part 63 Subpart JJJJJ

The Boiler is not subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ). The unit is considered an existing natural gas boiler rated less than 10 MMBtu/hr.

Gas-fired boilers are exempt from 40 CFR Part 63, Subpart JJJJJ.

D. Dryers and Steam Tunnel

Cintas operates four dryers and a steam tunnel to launder uniforms. The four dryers (#1 - #4 inclusive) are each rated at 1.4 MMBtu per hour, firing natural gas. The four dryers each vent to a separate stack (Stacks #2 – 5 inclusive).

The steam tunnel has an input capacity of 1.5 MMBtu per hour, and also fires natural gas. The steam tunnel vents to its own stack (Steam tunnel stack).

The BACT/BPT emission limits for each of the dryers and steam tunnel firing natural gas were based on the following:

- PM/PM₁₀ – 0.05 lb/MMBtu based on 06-096 CMR 115, BACT/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 or previous BACT

The BACT/BPT emission limits for each of the Dryers and the Steam Tunnel are the following:

<u>Unit</u>	<u>PM</u> <u>(lb/hr)</u>	<u>PM₁₀</u> <u>(lb/hr)</u>	<u>SO₂</u> <u>(lb/hr)</u>	<u>NO_x</u> <u>(lb/hr)</u>	<u>CO</u> <u>(lb/hr)</u>	<u>VOC</u> <u>(lb/hr)</u>
Dryer #1	0.07	0.07	0.01	0.14	0.11	0.01
Dryer #2	0.07	0.07	0.01	0.14	0.11	0.01
Dryer #3	0.07	0.07	0.01	0.14	0.11	0.01
Dryer #4	0.07	0.07	0.01	0.14	0.11	0.01
Steam Tunnel	0.08	0.08	0.01	0.15	0.12	0.01

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

E. Shop Towel Laundering

Process Description:

Cintas has requested an amendment to its air emission license to specifically address VOC and HAP emissions from laundering of shop towels.

Cintas performed a stack test on April 19, 2012, as ordered by the U. S. Environmental Protection Agency, at its Cumberland, Rhode Island facility, to measure emissions of VOCs and HAPs from the laundering of shop towels. The facility at Cumberland is very similar to the Cintas facility in Westbrook, Maine.

Cintas launders a variety of products including uniforms, wet mops, bar towels, carpet mats and shop towels. Cintas does not launder print or furniture towels. Shop towels, which are made of cotton and typically dyed red, comprise approximately five (5) percent of the facility's laundry load. Customers use shop towels for cleaning general soil, grease or oil from parts or mechanical equipment, and may use solvents having flash points above 140°F, in low volumes to loosen materials being removed. Cintas does not accept shop towels which contain free liquids.

Shop towels take approximately 55 minutes to wash, and 30 minutes to dry.

Shop towels are automatically loaded into washing machines via chutes and washed with detergent and hot water. There is a passive vent on top of each washing machine which exhausts inside the building. After washing, shop towels are automatically transferred by a moving conveyor to a dryer vented via a stack to the roof. Dried laundry is discharged from the dryers to a conveyor line for sorting and final processing.

Waste water from the washing machines is discharged into trenches in the wash alley floor and transported to a pit in the waste water treatment room where the process of treating the wash water begins.

Primary sources of VOC and HAP emissions from laundering shop towels are:

1. Washer vents which exhaust into the wash alley where emissions co-mingle into the facility's HVAC system air flows and exhaust;
2. Dryer exhaust stacks (which vent to the outside of the building);
3. The operations in the waste water treatment room which vent through general room ventilation.

Emission Estimates:

The emission testing was conducted to quantify total VOC and HAP emissions associated with processing shop towels. Three potential emission sources were identified and sampled: the washing machine vents, the dryer vents and equipment in the waste water treatment (WWT) room.

Specific objectives of the emission test included:

- measurement of VOC/HAP emissions from the washing machines due to laundering of shop towels;
- measurement of VOC/HAP emissions from the dryers due to drying shop towels;
- measurement of VOC/HAP emissions from the WWT room;
- calculation of emissions from shop towel laundering and drying, and from WWT equipment, on a pound emitted per 1000 pounds soiled product basis using emissions test data and shop towel data.

The emission factors developed from stack testing and used to calculate emissions from the Westbrook facility are:

VOC emission factors, expressed as pound/1000 pounds soiled shop towels: washers – 0.42; dryers – 4.59; WWT - 1.78; combined emission factor – 6.8.

HAP emission factors, expressed as pound/1000 pounds soiled shop towels: washers – 0.24; dryers – 0.27; WWT – 0.73; combined emission factor – 1.2.

Westbrook laundered approximately 457,520 pounds of shop towels between September 2011 and September 2012. Using the emission factors developed from the Cumberland stack test, actual VOC emissions were 1.55 tons per year and total HAP emissions were 0.28 tons per year.

Maximum Emissions:

Cintas proposes to limit VOC and HAP emissions from the laundering of shop towels at the facility by following Best Management Practices and accepting a production limitation of 2,911,765 pounds of shop towels per year.

Compliance shall be demonstrated by maintenance of records, on a monthly and 12-month rolling total basis, of the weight of shop towels laundered.

Best Available Control Technology (BACT) Analysis:

A BACT analysis was performed, taking into account the relatively small emissions of VOC and HAP from the towel laundering process. Technologies available to potentially control VOC and HAP emissions from the laundering of shop towels at the facility include a stripper/washer/condenser system, or add on controls such as thermal oxidation, catalytic oxidation, adsorption and/or condensation.

Thermal Oxidation refers to the essentially complete, gas-phase combustion of VOCs and HAPs to produce carbon dioxide and water vapor. Oxidation is achieved by heating the VOC and HAP exhaust in the presence of oxygen. Supplemental fuel will be required to maintain minimum combustion conditions due to the excess air required by the dryers. Thermal oxidation is most effective in steady state applications where the unit is not required to cycle on and off. In the Cintas facility, the dryers do not operate continuously, and when they do operate, shop towels are dried only a small portion of the time. Also, because the shop towels are wet, the oxidizer would require additional fuel to maintain the design combustion temperature in the presence of the high moisture content of the dryer exhaust. Thermal oxidation was not considered technically feasible nor practical for this application.

Catalytic Oxidation is the essentially complete combustion of VOCs and HAPs to produce carbon dioxide and water vapor through the use of an oxidation catalyst. Supplemental fuel is required for dilute streams. Catalytic oxidizers typically use a pelletized chromia/alumina catalyst in a fluidized bed, which must be replaced every few years as pellets diminish in size and pressure drop in the bed increases. Catalytic oxidation was considered not technically feasible for this application because of the cycling exhaust streams with variable VOC and HAP concentrations and higher moisture content.

Adsorption using activated carbon or zeolite adsorbents has been used to remove a wide variety of VOCs and HAPs from air streams. When the adsorbent is fully saturated, it can be desorbed with hot air, nitrogen or steam. The effectiveness of adsorption systems can be greatly affected by many factors such as the presence of particulate, types and concentration of VOCs and HAPs, temperature and moisture in the exhaust stream.

If there is particulate in the exhaust, the adsorption media can quickly become blinded and the pressure drop increased to a point that the system is inoperable, thus exhaust streams containing particulate are not suitable for control by adsorption unless the particulate is removed prior to the control unit.

Additionally, carbon adsorption is not suited to exhaust streams containing heavy organics with high boiling points (above 200°F) tend to foul the carbon. The oil and grease commonly found on shop towels and associated with the emissions from the dryers are often higher boiling point organics and lubricants, thus the effectiveness of an adsorption unit would be greatly reduced due to fouling.

Carbon adsorption systems were considered technically infeasible for this application.

Condensation technology has been used to control VOC and HAP emissions in streams with concentrations greater than one percent, however it has not been effective in relatively dilute air streams. Low removal efficiencies would be expected and the condensate, consisting of mixed solvents with water, would have to be disposed of as a waste. A cryogenic system would be required to achieve a high removal efficiency however given the low removal efficiency, the large capital cost of a cryogenic system, and the transfer of the problem to another medium, this system is not given further consideration.

Limitation of Throughput of the amount of shop towels washed at the facility is one way to reduce total emissions of VOC and HAP. Cintas proposes its air emission license include a limit of 2,911,765 pounds of shop towels per year, thereby limiting the facility to 9.9 tons per year of VOC emissions, and 1.7 tons per year of HAP emissions.

In addition to the limitation of throughput, Best Management Practices (BMP) designed to minimize fugitive emissions and maximize VOCs and HAPs retained in the waste water and sent to the WWT facility are proposed.

Best Management Practices:

Cintas has proposed the following BMP for laundering shop towels:

- Cintas shall launder no more than the license-allowed quantity of shop towels per year.
- Cintas shall launder shop towels. Cintas shall not launder print or furniture towels.

- Cintas shall employ the following pre-laundering procedures:
 - containers or bags of soiled shop towels received at the facility shall be kept closed until the towels are sorted for washing.
 - soiled shop towels received during the day generally shall be laundered the same day or night. Soiled shop towels not laundered on the day or night of receipt shall be stored in closed containers or bags in a covered area outside the laundry building.
 - any shop towels containing or saturated with free liquid received at the facility shall be stored in closed containers or bags in a covered area outside the laundry building and transported off-site for handling in accordance with applicable environmental laws.
 - any print or furniture towels received at the facility shall be stored in closed containers or bags in a covered area outside the building and shall be transported off-site for handling in accordance with applicable environmental laws.
- Cintas shall limit soiled shop towel load sizes on a 12-month rolling average to no more than 1.25 times the manufacturer's rated clean-towel capacity of the washers. The facility shall not launder any soiled shop towel load weighing more than 1.75 times the manufacturer's rated clean towel capacity of the washer.
- Cintas shall keep waste water trenches, settling pits and equalization tanks covered at all times other than during maintenance operations. This provision does not apply to plumbing vents installed on such trenches, pits and tanks.
- Cintas shall provide training for all employees who handle soiled shop towels, or who are otherwise responsible for shop towel laundering, regarding proper procedures for transporting, receiving, storing, processing, washing and drying shop towels.
- Cintas shall maintain current copies of the following records onsite and have them available for Department review:
 - definitions of shop, print and furniture towels, and written procedures for employees and managers who handle or are otherwise responsible for towel laundering to ensure Cintas does not launder print or furniture towels or shop towels containing free liquids.
 - training materials regarding shop towel handling procedures, and records demonstrating all current employees who handle shop towels, or who are otherwise responsible for towel laundering, have been trained on proper handling procedures.
 - wash formula for shop towels; and
 - soiled shop towel throughput records, including washer load size records.

Recordkeeping:

Compliance with BMP shall include maintaining records:

- of the definition of shop, print and furniture towels and written procedures for employees and managers who handle or are otherwise responsible for towel laundering to ensure Cintas does not launder print or furniture towels or shop towels containing free liquids.
- of current training materials regarding shop towel handling procedures
- demonstrating all employees who handle shop towels or who are responsible for towel laundering have been trained on proper handling procedures
- of the wash formula for shop towels
- of soiled shop towel throughput, including washer load size records.

F. Annual Emissions

1. Total Annual Emissions

Cintas shall be restricted to the following annual emissions, based on a 12-month rolling total. The tons per year limits were calculated based on 8760 hours per year of operation, and laundering of a maximum of 2,911,765 pounds of shop towels.

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

	<u>PM</u>	<u>PM₁₀</u>	<u>SO₂</u>	<u>NO_x</u>	<u>CO</u>	<u>VOC</u>	<u>HAP</u>
Boiler	2.29	2.29	0.03	4.45	3.74	0.24	
Dryer #1	0.31	0.31	0.01	0.60	0.50	0.03	
Dryer #2	0.31	0.31	0.01	0.60	0.50	0.03	
Dryer #3	0.31	0.31	0.01	0.60	0.50	0.03	
Dryer #4	0.31	0.31	0.01	0.60	0.50	0.03	
Steam Tunnel	0.31	0.31	0.01	0.60	0.50	0.03	
Shop Towel Laundry						9.9	1.7
Total TPY	3.8	3.8	0.08	7.5	6.2	10.4	1.7

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, Cintas 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:

Pollutant	Tons/Year
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-999-71-B-N/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**

A. Fuel

1. The Boiler shall fire natural gas. [06-096 CMR 115, BACT]
2. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel delivered. 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:

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

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

<u>Emission Unit</u>	<u>PM</u> (lb/hr)	<u>PM₁₀</u> (lb/hr)	<u>SO₂</u> (lb/hr)	<u>NO_x</u> (lb/hr)	<u>CO</u> (lb/hr)	<u>VOC</u> (lb/hr)
Boiler	0.52	0.52	0.01	1.02	0.85	0.06

D. Visible emissions from the Boiler shall not exceed 10% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous three (3) hour period. [06-096 CMR 101]

E. New Source Performance Standards for Dc Boilers

The Boiler is subject to Federal New Source Performance Standards, Subpart Dc.

Cintas shall comply with all requirements of 40 CFR Part 60, Subpart Dc applicable to the Boiler including, but not limited to, the following:

1. Cintas shall record and maintain records of the amounts of each fuel combusted during each month. [40 CFR §60.48c(g)]
2. Cintas shall submit to EPA and the Department semi-annual reports. These reports shall include the calendar dates covered in the reporting period and records of fuel supplier certifications. The semi-annual reports are due within 30 days of the end of each 6-month period.
3. The following address for EPA shall be used for any reports or notifications required to be copied to them:

Compliance Clerk
USEPA Region 1
5 Post Office Sq., Suite 100
Boston, MA 02109-3912

(17) **Dryers and Steam Tunnel**

A. Fuel

The Dryers and Steam Tunnel shall each fire natural gas. [06-096 CMR 115, BACT]

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

<u>Unit</u>	<u>PM</u> (lb/hr)	<u>PM₁₀</u> (lb/hr)	<u>SO₂</u> (lb/hr)	<u>NO_x</u> (lb/hr)	<u>CO</u> (lb/hr)	<u>VOC</u> (lb/hr)
Dryer #1	0.07	0.07	0.01	0.14	0.11	0.01
Dryer #2	0.07	0.07	0.01	0.14	0.11	0.01
Dryer #3	0.07	0.07	0.01	0.14	0.11	0.01
Dryer #4	0.07	0.07	0.01	0.14	0.11	0.01
Steam Tunnel	0.08	0.08	0.01	0.15	0.12	0.01

C. Visible emissions from each of the Dryers and the Steam Tunnel shall not exceed 10% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a three (3) hour period. [06-096 CMR 115,

(18) **Shop Towel Laundering**

Cintas use the following BMP for laundering shop towels:

- A. Cintas shall launder a maximum of 2,911,765 pounds of shop towels per year, based on a 12-month rolling total.
- B. Cintas shall launder only shop towels. Cintas shall not launder print or furniture towels.

- C. Cintas shall employ the following pre-laundering procedures:
- containers or bags of soiled shop towels received at the facility shall be kept closed until the towels are sorted for washing.
 - soiled shop towels received during the day generally shall be laundered the same day or night. Soiled shop towels not laundered on the day or night of receipt shall be stored in closed containers or bags in a covered area outside the laundry building.
 - any shop towels containing or saturated with free liquid received at the facility shall be stored in closed containers or bags in a covered area outside the laundry building and transported off-site for handling in accordance with applicable environmental laws.
 - any print or furniture towels received at the facility shall be stored in closed containers or bags in a covered area outside the building and shall be transported off-site for handling in accordance with applicable environmental laws.
- D. Cintas shall limit soiled shop towel load sizes on a 12-month rolling average to no more than 1.25 times the manufacturer's rated clean-towel capacity of the washers. The facility shall not launder any soiled shop towel load weighing more than 1.75 times the manufacturer's rated clean towel capacity of the washer.
- E. Cintas shall keep waste water trenches, settling pits and equalization tanks covered at all times other than during maintenance operations. This provision does not apply to plumbing vents installed on such trenches, pits and tanks.
- F. Cintas shall adhere to Best Management Practices for laundering shop towels, including but not limited to:
1. Cintas shall provide training for all employees who handle soiled shop towels or who are otherwise responsible for shop towel laundering, regarding proper procedures for transporting, receiving, storing, processing, washing and drying shop towels.
 2. Cintas shall maintain current copies of the following records onsite and have them available for Department review:
 - definitions of shop, print and furniture towels, and written procedures for employees and managers who handle or are otherwise responsible for towel laundering.
 - training materials regarding shop towel handling procedures, and records demonstrating all current employees who handle shop towels, or who are otherwise responsible for towel laundering, have been trained on proper handling procedures.
 - the wash formula for shop towels.
 - soiled shop towel throughput records, including washer load size records.

Recordkeeping:

Compliance shall be demonstrated by records of:

- the definitions of shop, print and furniture towels, and written procedures for employees and managers who handle or are otherwise responsible for towel laundering.
- current training materials regarding shop towel handling procedures.
- training of all employees who handle shop towels, or who are responsible for towel laundering, in the proper handling procedures.
- the wash formula for shop towels.
- soiled shop towel throughput records, including washer load size records.

- (19) Cintas 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 1 DAY OF October, 2014.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Maia 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: 06/09/2014

Date of application acceptance: 06/16/2014

Date filed with the Board of Environmental Protection:

This Order prepared by N. Lynn Cornfield, Bureau of Air Quality.

