



DEPARTMENT ORDER

**True Textiles, Inc.
Piscataquis County
Guilford, Maine
A-367-71-N-R/M (SM)**

**Departmental
Findings of Fact and Order
Air Emission License
Renewal / Minor Revision**

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

True Textiles, Inc. (True Textiles) has applied to renew its Air Emission License for the operation of emission sources associated with its textile manufacturing facility. This license also includes a minor revision to do the following:

- Assign lb/hr emission limits to Generator #1;
- Lower the boiler distillate fuel limit to 650,000 gal;
- Change the wood fuel usage limit for the boilers to a tons/yr basis from hr/yr;
- License the removal of two inspection stations;
- Change the VOC and HAP tracking method for dyeing operations to be on an as-used basis rather than be based on inventory; and
- Lower the VOC emissions limit for Dyeing from 38.8 tons per year to 32 tons per year due to emission reductions resulting from reformulations in the chemical composition of dyes used by the facility, subsequently removing *Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds*, 06-096 C.M.R. ch. 134 applicability.

True Textiles, Inc. transferred its license to Duval Acquisitions (US), Inc. (Duval) on 10/27/2016; Duval subsequently changed its name to True Textiles, Inc.

The equipment addressed in this license is located at 9 Oak Street, Guilford, 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, % sulfur	Date of Manuf.	Date of Install.	Stack #
Boiler #1	16.5	118.0 gal/hr	Distillate fuel, 0.5% by weight	1948	1948	1
	16.9	1.9 ton/hr	Wood			
Boiler #2	16.5	118.0 gal/hr	Distillate fuel, 0.5% by weight	1948	1948	2
	16.9	1.9 ton/hr	Wood			
Boiler #3	12.8	91.0 gal/hr	Distillate fuel, 0.5% by weight	1968	1968	1
Boiler #4	2.8	19.8 gal/hr	Distillate fuel, 0.5% by weight	1986	1986	3
Boiler #5	3.5	25.0 gal/hr	Distillate fuel, 0.5% by weight	1990	1990	3

Generators

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (HP)	Fuel Type, % sulfur	Max. Firing Rate (gal/hr)	Date of Manuf.	Date of Install.
Generator #1	0.55	40	Propane, Negligible sulfur	5.8 gal/hr	2006	2006

Process Equipment

Equipment	Production Rate	Pollution Control Equipment	Stack #
Dyeing Kettles	Batch operations	N/A	N/A
YT #1 Yam Texturing	125 lb/hr	N/A	10
YT #2 Yam Texturing	75 lb/hr	N/A	10
YT #3 Yam Texturing	200 lb/hr	N/A	11
Steam Dryer	40 yd fabric/min	N/A	12
Four Inspection Stations	40 yd fabric/min	N/A	N/A

C. Definitions

Distillate Fuel. For the purposes of this license, *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.

D. Application Classification

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

The application for True Textiles does not include the installation of new or modified equipment and the minor revision changes being made will result in a decrease in potential emissions. Therefore, the license is considered to be a renewal of currently licensed emission units and a minor revision and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

With the annual fuel limit on the boilers, the volatile organic compounds (VOC) and hazardous air pollutants (HAP) limits associated with the process, and the operating hours restriction on the emergency generator, the facility is licensed below the major source thresholds for criteria pollutants and for HAP and is considered a synthetic minor and 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 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

True Textiles produces fabric for commercial, residential, healthcare, and hospitality interiors. The facility's operations include stock and yarn fiber dyeing, drying operations, yard processing, warping and weaving operations, and associated materials handling operations. The fiber is 95% polyester recycled from soda bottles and 5% olefin, wool, and virgin polyester, and is received in two forms: stock or yarn fiber.

The stock fibers are unprocessed "fluff" fibers received in bales. The stock fiber moves from receiving areas to the dye area. It is placed into a vessel where it is soaked in hot water to relax the kink in the fibers and then compressed into a "cake." Next the fiber is moved to a dye kettle, where dyes that have been mixed according to the desired color are added and the water is heated. Inside the dye kettle, the dye is pumped through the fiber in two directions to insure even color distribution. After it is dyed, the fiber is rinsed and dried in a centrifugal spinner to remove excess water. After the dye process, the stock fibers are then shipped to another True Textiles facility to be spun into yarn. The yarn is then returned to the Guilford Facility for further processing.

The yarn fiber is received in packages that may or may not already be dyed. Fiber received as yarn is dyed in the "package dye" area. Similar to stock dyeing, the yarn packages are loaded into dye machines where dyes and auxiliaries are added with water and heated under pressure. Wastewater from both dye houses is discharged to a heat recovery system prior to being discharged to the onsite equalization basin, and then discharged to the publicly owned treatment works.

Particulate matter from the yarn processing area is vented to a baghouse that returns the cleaned air back into the building; therefore, there are no emissions from this process. Some yarn is also processed through one of three yarn texturing machines to rough-up the surface and change the appearance of the yarn. Textured yarn has a softer feel and a less reflective appearance. These machines draw the yarn across a jet of compressed air with water and heat then re-spool the textured yarn onto cardboard tubes in preparation for weaving.

Fabric is then woven into a variety of patterns on computer-controlled looms. Warping combines individual threads on beams in preparation for weaving. Weaving is performed on looms that form textiles by interlacing one set of yarns with another set oriented perpendicularly to each other. The warping and weaving operations have negligible emissions. Woven fabric is shipped out of state for finishing prior to being sold to the consumer.

True Textiles owns two electrically-powered radio frequency dryers to dry wool fibers after they have been dyed. Any potential emissions from this process are included under dyeing.

The scour range and steam dryer are also used infrequently to clean and dry woven fabric. The fabric is first cleaned in a two-stage Scour Range, and then dried in the Steam Dryer. These units typically use only water or non-VOC-containing soap if needed. However, to allow for operational flexibility, True Textiles is proposing to maintain the current limit of 2 tons per year (TPY) of VOC to allow for the use of different cleaners in this process.

Finally, the fabric is inspected at one of four Inspection Stations and spot-cleaned using various cleaners, some of which may contain VOC.

True Textiles currently owns two cold cleaning parts washers that support the maintenance activities at the facility. These units use ZEP Dyna 143 cleaning solvent. An additional parts washer containing 600 milliliters of isopropanol (IPA) is used to periodically clean the drop wires from the weaving machines.

C. Boilers #1-#5

True Textiles operates five boilers, Boiler #1, Boiler #2, Boiler #3, Boiler #4, and Boiler #5 for process steam and facility heat.

Boilers #1 and #2

Boilers #1 and #2 are identical boilers that were manufactured in 1948 by Combustion Engineering Company. The boilers fire distillate fuel (primarily #2 fuel oil and biodiesel) and wood fuel and are both equipped with O₂ trim for improved combustion efficiency. When firing distillate fuel, the boilers are rated at a maximum heat input capacity of 16.5 MMBtu/hr, each, and when firing wood they are each rated at 16.9 MMBtu/hr.

The wood fuel fired in Boilers #1 and #2 consists primarily of wood chips which may contain bark, sawdust, other wood fuel, and wood derived materials including cardboard and ground paper cores. The wood has a higher heating value of 4,500 Btu/lb and an average moisture content of approximately 50%.

Emissions from Boiler #1 are vented through a single cyclone to control particulate emissions. Boiler #2 vents through two cyclones arranged in series; the ash collected in the first cyclone is reintroduced back into the boiler. Ash collected from the second cyclone and from the cyclone on Boiler #1 is periodically screw-conveyed into a covered container and emptied into a covered dumpster for disposal.

Boilers #3, #4, and #5

Boilers #3, #4, and #5 are rated at maximum heat input capacities of 12.8 MMBtu/hr, 2.8 MMBtu/hr, and 3.5 MMBtu/hr, respectively and all fire distillate fuel, primarily in the forms of #2 fuel oil and biodiesel. The boilers were installed in 1968, 1986, and 1990, respectively. Boiler #3 exhausts through a shared stack with Boiler #1 and Boilers #4 and #5 exhaust through a shared stack.

1. BPT Findings

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

Distillate Fuel: All Boilers

PM/PM ₁₀	0.20 lb/MMBtu from 06-096 C.M.R. ch. 103 <u>For Boilers #1-3</u>
	0.12 lb/MMBtu from 06-096 C.M.R. ch. 103 <u>For Boilers #4 & #5</u>
SO ₂	0.5 lb/MMbtu based on the firing of distillate fuel with 0.5% sulfur by weight <u>For all Boilers</u>
NO _x	20 lb/1000 gal from AP-42 Table 1.3-1, dated 5/10 <u>For all Boilers</u>
CO	5 lb/1000 gal from AP-42 Table 1.3-1, dated 5/10 <u>For all Boilers</u>
VOC	0.20 lb/1000 gal from AP-42 Table 1.3-3, dated 5/10 <u>For Boilers #1-3</u>
	0.34 lb/1000 gal from AP-42 Table 1.3-3, dated 5/10 <u>For Boilers #4 & #5</u>
Visible Emissions	06-096 C.M.R. ch. 115, BPT <u>For all Boilers</u>

Wood: Boilers #1 and #2

PM	0.35 lb/MMBtu from AP-42 Table 1.6-1, dated 09/03
PM ₁₀	0.32 lb/MMBtu from AP-42 Table 1.6-1, dated 09/03
SO ₂	0.025 lb/MMBtu from on AP-42 Table 1.6-2, dated 09/03
NO _x	0.22 lb/MMBtu from AP-42 Table 1.6-2, dated 09/03
CO	0.60 lb/MMBtu from AP-42 Table 1.6-2, dated 09/03
VOC	0.017 lb/MMBtu from AP-42 Table 1.6-3, dated 09/03
Visible Emissions	06-096 C.M.R. ch. 115, BPT

The BPT emission limits for the boiler are the following:

Unit	Pollutant	lb/MMBtu
Boiler #1	PM	0.20
Boiler #2	PM	0.20
Boiler #3	PM	0.20
Boiler #5	PM	0.12

Unit	Fuel	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	Distillate	3.30	3.30	8.25	2.36	0.59	0.02
	Wood	5.92	5.41	0.42	3.72	10.14	0.29
Boiler #2	Distillate	3.30	3.30	8.25	2.36	0.59	0.02
	Wood	5.92	5.41	0.42	3.72	10.14	0.29
Boiler #3	Distillate	2.56	2.56	6.40	1.82	0.46	0.02
Boiler #4	Distillate	0.34	0.34	1.40	0.40	0.10	0.01
Boiler #5	Distillate	0.42	0.42	1.75	0.50	0.13	0.01

Visible Emissions

Visible emissions from Stack 1 (shared by Boilers #1 and #3) shall not exceed 20% opacity on a six-minute block average basis when Boiler #1 is firing distillate fuel.

Visible emissions from Stack 1 (shared by Boilers #1 and #3) shall not exceed 30% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a three hour period during which time visible emissions shall not exceed 50% opacity when Boiler #1 is firing wood.

Visible emissions from Stack 2 (Boiler #2) shall not exceed 20% opacity on a six-minute block average basis when firing distillate fuel

Visible emissions from Stack 2 (Boiler #2) shall not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a three hour period during which time visible emissions shall not exceed 50% opacity when Boiler #2 is firing wood.

Visible emissions from Stack 3 (shared by Boilers #4 and #5) shall not exceed 20% opacity on a six-minute block average basis.

Visible emissions from the ash handling systems shall not exceed 20% opacity on a six-minute block average basis, during which time visible emissions shall not exceed 30% opacity.

Fuel Limits for the Boilers

True Textiles shall fire no more than 650,000 gallons of distillate fuel in the boilers on a 12-month rolling total basis.

True Textiles shall not fire more than 16,644 tons of wood with a moisture content of 50%, or its equivalent¹, in Boilers #1 and #2 on a 12-month rolling total basis.

Fuel Sulfur Content Requirements

Boilers #1-#5 are all licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 38 M.R.S. § 603-A(2)(A)(3), as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm). Therefore, beginning July 1, 2018, the distillate fuel purchased or otherwise obtained for use in any of the boilers shall not exceed 0.0015% by weight (15 ppm).

2. Periodic Monitoring

Periodic monitoring for the boilers 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. True Textiles shall also maintain a log of operation hours of Boilers #1 and #2 when firing wood on a monthly and 12-month rolling total basis.

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

Due to the years of manufacture of Boilers #1-3 and the sizes of Boilers #4 and #5, none is 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]

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

Boilers #1-#5 are all 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. Boilers #1-#3 are considered existing oil boilers rated

¹ Equivalent, for the purpose of this limit, represents total Btu. 16,644 tons/yr is based on a heating value of approximately 4,500 Btu/lb for wood with a moisture content of 50% and is equal to 150,000 MMBtu/yr.

higher than 10 MMBtu/hr and Boilers #4 and #5 are considered existing oil boilers rated less than 10 MMBtu/hr. [40 C.F.R. §§ 63.11193 and 63.11195]

A summary of the currently applicable federal 40 C.F.R. Part 63, Subpart JJJJJ requirements is listed below. At this time, the Department has not taken delegation of this area source MACT (Maximum Achievable Control Technology) rule promulgated by EPA; however, True Textiles is still subject to the requirements. Notification forms and additional rule information can be found on the following website: <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.

a. Compliance Dates, Notifications, and Work Practice Requirements

(1) Initial Notification of Compliance

An Initial Notification submittal to EPA was due no later than January 20, 2014. [40 C.F.R. § 63.11225(a)(2)]

True Textiles submitted its Initial Notification to EPA on 09/08/2011 as True Textiles

(2) Boiler Tune-Up Program

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

(ii) Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

Boiler #	Boiler Category	Tune-Up Frequency
#3	New or Existing Oil, Biomass and Coal fired boilers that are not designated as "Boilers with Less Frequent Tune-up Requirements" listed below	Every 2 years
	New and Existing Oil, Biomass, and Coal fired Boilers with Less Frequent Tune-up Requirements	
	Seasonal (see definition § 63.11237)	Every 5 years
	Limited use (see definition § 63.11237)	Every 5 years
#4 & #5	Oil fired boilers with a heat input capacity of ≤5MMBtu/hr	Every 5 years
#1 & #2	Boiler with oxygen trim system which maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune up	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

(iii) The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:

- (a) As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 C.F.R. § 63.11223(b)(1)]
 - (b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]
 - (c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 C.F.R. § 63.11223(b)(3)]
 - (d) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
 - (e) Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 63.11223(b)(5)]
 - (f) If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 C.F.R. § 63.11223(b)(7)]
- (iv) Tune-Up Report: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
- (a) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
 - (b) A description of any corrective actions taken as part of the tune-up of the boiler; and

(c) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
[40 C.F.R. § 63.11223(b)(6)]

(v) After conducting the initial boiler tune-up, a Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014.
[40 C.F.R. § 63.11225(a)(4) and 40 C.F.R. § 63.11214(b)]

True Textiles submitted its Notification of Compliance Status to EPA on 06/25/2014 as True Textiles.

(3) Compliance Report

A compliance report shall be prepared by March 1st biennially which covers the previous two calendar years. The report shall be maintained by the source and submitted to the Department and to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

- (i) Company name and address;
- (ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;
- (iii) A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- (iv) The following certifications, as applicable:
 - (a) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
 - (b) "No secondary materials that are solid waste were combusted in any affected unit."
 - (c) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

(4) Energy Assessment

Boilers #1-#3 are subject to the energy assessment requirement as follows:

A one-time energy assessment was required to be performed by a qualified energy assessor on the applicable boilers, and in accordance with 40 C.F.R. Part 63, Subpart JJJJJ, Table 2(16). [40 C.F.R. § 63.11196(a)(3)]

True Textiles conducted its one-time energy assessment on 06/25/2014 as True Textiles.

b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJ including the following [40 C.F.R. § 63.11225(c)]:

- (1) Copies of notifications and reports with supporting compliance documentation;
- (2) Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
- (3) Records of the occurrence and duration of each malfunction of each applicable boiler; and
- (4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review.

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

D. Temporary Boilers

True Textiles has included in its application a request to permit the operation of up to two distillate fuel fired temporary boilers that would be installed in the event of a catastrophic occurrence. This is an effort to ensure that True Textiles can minimize any interruptions in business should a catastrophic event, such as a flood, occur. To satisfy the needs of the facility, the temporary boilers may have a combined heat input capacity of up to 29.0 MMBtu/hr, although the actual boilers rented at the time of such an event would depend on availability of rental boilers at the time.

Should the rental boilers(s) have heat input capacities between 10 and 100 MMBtu/hr, the boilers(s) may be subject to Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, 40 C.F.R. Part 60, Subpart Dc and *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJ. If the boiler(s) are

subject to these rules, True Textiles shall be required to satisfy all of the applicable requirements for each affected unit.

1. BPT Findings

The BPT for the temporary boilers are as follows:

- a. True Textiles shall notify the Department if any temporary boilers are used at the facility.
- b. True Textiles shall not use a temporary boiler that is larger than 29.0 MMBtu/hr unless it meets the requirements of "Temporary Boilers" as defined in 40 C.F.R. Part 60, Subpart Dc and in 40 C.F.R. Part 63, Subpart JJJJJ.
- c. The cumulative total maximum input capacity of the temporary boilers shall not exceed the cumulative total MMBtu/hr maximum input capacity of licensed boilers that fire distillate fuel (52.1 MMBtu/hr).
- d. Any temporary boilers that are employed by True Textiles shall only fire distillate fuel or another, cleaner fuel upon Department approval.
- e. True Textiles shall not use any temporary boiler for more than six months.
- f. Each temporary boiler shall meet the following limits:

Unit	Pollutant	lb/MMBtu
Temporary Boilers	PM (filterable)	0.03 ²
Temporary Boilers	PM	0.12 ³

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Temporary Boiler	0.12 * C or 0.03 * C ¹	0.12 * C	0.5 * C	$\frac{20 * F}{1,000}$	$\frac{5 * F}{1,000}$	$\frac{0.2 * F}{1,000}$

Where,

- C = Maximum Heat Input Capacity in MMBtu/hr
F = Maximum Firing Rate in gal/hr

² For boilers rated higher than 10 MMBtu/hr which are subject to 40 C.F.R. Part 63, Subpart JJJJJ and do not fire ultra-low-sulfur liquid fuel as defined in § 63.11237 [40 C.F.R. Part 63, Subpart JJJJJ, Table 1 and 40 C.F.R. § 63.11210(f)]

³ Each temporary boiler employed that is rated above 3.0 MMBtu/hr shall meet the 0.12 lb/MMBtu limit from Fuel Burning Equipment Particulate Emission Standard, 06-096 C.M.R. ch. 103.

Emission factors for PM/PM₁₀ for the Temporary Boilers are based on 06-096 C.M.R ch. 103; the emission factor for SO₂ is based on the firing of distillate fuel with a maximum fuel sulfur content of 0.5% by weight; the emission factors for NO_x and CO are based on AP-42 Table 1.3-1, dated 5/10; and the emission factor for VOC is based on AP-42 Table 1.3-1, dated 5/10 for Commercial/Industrial boilers.

- g. Visible emissions from each temporary boiler shall not exceed 20% opacity on a six-minute block average basis.
2. True Textiles shall include fuel burned in all temporary boilers employed by the facility in the distillate fuel limit provided for the boilers. If a cleaner fuel is employed, energy input may be used as a substitute to estimate an equivalent distillate fuel use.

Because of the inclusion of the temporary boilers in the facility's annual fuel limit, the temporary boilers would result in the same or lower annual emissions as the current boilers. The inclusion of the temporary emergency boilers in the Air Emission License will therefore not affect the facility's current annual emission limits.

3. 40 C.F.R. Part 63, Subpart JJJJJ

Temporary boilers installed by True Textiles may be 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. [40 C.F.R. §§ 63.11193 and 63.11195]

Temporary boilers are exempt from applicability to this rule via 40 C.F.R. § 63.11195(h). Subpart JJJJJ defines temporary boilers as follows:

Temporary boiler means any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A boiler is not a temporary boiler if any one of the following conditions exists:

- (1) The equipment is attached to a foundation
- (2) The boiler or a replacement remains at a location within the facility and performs the same or similar function for more than 12 consecutive months, unless the regulatory agency approves an extension. An extension may be granted by the regulating agency upon petition by the owner or operator of a unit specifying the basis for such a request. Any temporary boiler that replaces a temporary boiler at a location within the facility and performs the same or similar function will be included in calculating the consecutive time period unless there is a gap in operation of 12 months or more.

- (3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at the facility for at least 3 months each year.
- (4) The equipment is moved from one location to another within the facility but continues to perform the same or similar function and serve the same electricity, steam, and/or hot water system in an attempt to circumvent the residence time requirements of this definition.

If the temporary boilers installed do not meet the definition of temporary boilers presented above, True Textiles shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJ applicable to each boiler including, but not limited to, the conditions below, displayed for new boilers rated between 10 MMBtu/hr and 30 MMBtu/hr that fire distillate fuel with a sulfur content of 0.5% by weight. At this time, the Department has not taken delegation of this area source MACT (Maximum Achievable Control Technology) rule promulgated by EPA; however, True Textiles is still subject to the requirements. Notification forms and additional rule information can be found on the following website: <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.

a. Compliance Dates, Notifications, and Work Practice Requirements

(1) Initial Notification of Compliance

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

(2) Emission Limits and Work Practice Standards

- (i) Each Temporary boiler shall meet the following emission limit:

Unit	Pollutant	Ib/MMBtu
Temporary Boilers	PM (filterable)	0.03

[40 C.F.R. Part 63, Subpart JJJJJ, Table 1]

- (ii) True Textiles shall demonstrate initial compliance with the emission limit by conducting a performance (stack) test according to § 63.12212 and Table 4 of the subpart. Compliance shall be demonstrated no later than 180 days after the startup of the unit. [40 C.F.R. §§ 63.11210(a) and 63.11210(d)]
- (iii) True Textiles must minimize the boiler's startup and shutdown periods following the manufacturer's recommended procedures, if available. If manufacturer's recommended procedures are not available, True Textiles

must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available. True Textiles must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available. [40 C.F.R. §63.11214(d)]

- (iv) True Textiles shall keep records of the type and amount of all fuels burned in each boiler during the reporting period. [40 C.F.R. §63.11222(a)(2)]

(3) Boiler Tune-Up Program

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

Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. New boilers rated between 10 MMBtu/hr and 30 MMBtu/hr are required to be tuned-up biennially. True Textiles is not required to complete an initial tune-up on new boilers rated between 10 MMBtu/hr and 30 MMBtu/hr. [40 C.F.R. §§ 63.11223(a) and 63.11210 (g), and Table 2]

- (ii) The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:

- (a) As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 C.F.R. § 63.11223(b)(1)]
- (b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]
- (c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 C.F.R. § 63.11223(b)(3)]

- (d) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
 - (e) Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 63.11223(b)(5)]
 - (f) If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up.
[40 C.F.R. § 63.11223(b)(7)]
- (iii) Tune-Up Report: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
- (a) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before and after** the boiler tune-up;
 - (b) A description of any corrective actions taken as part of the tune-up of the boiler; and
 - (c) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
[40 C.F.R. § 63.11223(b)(6)]
- (4) Notification of Intent to Conduct a Performance Test (NOICPT)
- True Textiles shall submit a NOICPT at least 60 days before the performance stack test is scheduled to begin. [40 C.F.R. § 63.11225(a)(3)]
- (5) Notification of Compliance Status (NOCS) and Performance Test Results
- True Textiles shall submit a NOCS within 60 days of completion of the performance test required by this subpart. [40 C.F.R. § 63.11225(a)(4)]
- True Textiles shall also submit the results of the performance tests, including any associated fuel analyses. [40 C.F.R. § 63.11225(e)]
- (6) Compliance Report
- A compliance report shall be prepared by March 1st of each year. The report shall be maintained by the source and submitted to the Department and to the

EPA upon request, unless the source experiences any deviations from the applicable requirements of this Subpart during the previous calendar year, then the report must be submitted to the Department and to the EPA by March 15th. The report must include the items contained in § 63.11225(b)(1) through (4), including the following: [40 C.F.R. § 63.11225(b)]

- (i) Company name and address;
- (ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;
- (iii) A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- (iv) The following certifications, as applicable:
 - (a) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
 - (b) "No secondary materials that are solid waste were combusted in any affected unit."
 - (c) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."
- (v) If the sources experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken; and
- (vi) The total fuel use by each affected boiler subject to an emission limit for each calendar month within the reporting period.

b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJ including the following [40 C.F.R. § 63.11225(c)]:

- (1) Copies of notifications and reports with supporting compliance documentation;
- (2) Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
- (3) Records of the occurrence and duration of each malfunction of each applicable boiler; and
- (4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.
- (5) Records of the type and amount of fuel used on a monthly basis.

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports through their electronic reporting system. [40 C.F.R. § 63.11225(a)(4)(vi)]

4. 40 C.F.R. Part 60, Subpart Dc

Temporary boilers installed by True Textiles may be 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]

Temporary boilers are exempt from applicability to this rule via 40 C.F.R. § 60.40c(i). Subpart Dc defines temporary boilers as follows:

Temporary boiler means a steam generating unit that combust natural gas or distillate oil with a potential SO₂ emissions rate no greater than 26 ng/J (0.60 lb/MMBtu), and the unit is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A steam generating unit is not a temporary boiler if any one of the following conditions exists:

- (1) The equipment is attached to a foundation.
- (2) The steam generating unit or replacement remains at a location for more than 180 consecutive days. Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period.
- (3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.
- (4) The equipment is moved from one location to another in an attempt to circumvent the residence time requirements of this definition.
[40 C.F.R. §60.41c]

If the temporary boilers installed do not meet the definition of temporary boilers presented above, True Textiles shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to each boiler including, but not limited to, the following:

1. True Textiles shall submit notification to EPA and the Department of the date of construction, anticipated start-up, and actual start-up. This notification shall include the design heat input capacity of the boiler and the type of fuel to be combusted. [40 C.F.R. § 60.48c(a)]

2. True Textiles shall perform and submit to EPA and the Department an initial performance test within 30 days after achieving the maximum production rate at which the facility will be operated but not later than 180 days after the initial start-up of the facility. The performance test shall consist of fuel supplier certification of the sulfur content of the fuel fired in the boiler. The fuel supplier certification must contain the name of the oil supplier and a statement from the oil supplier that the oil complies with ASTM specifications for #2 fuel oil. [40 C.F.R. § 60.44c and 40 C.F.R. § 60.45c]
3. True Textiles shall record and maintain records of the amounts of each fuel combusted during each day or, if applicable, monthly records with fuel certifications. [40 C.F.R. § 60.48c(g)]
4. True Textiles shall submit semi-annual reports to EPA and to the Department. 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 six-month period. [40 C.F.R. § 60.48c(j) and 06-096 C.M.R. ch. 115, BPT]
5. The following address for EPA shall be used for any reports or notifications required to be copied to them:

U.S. Environmental Protection Agency, Region I
5 Post Office Square, Suite 100 (OES04-2)
Boston, MA 02109-3912
Attn: Air Compliance Clerk

E. Generator #1

True Textiles operates one emergency generator, Generator #1. Generator #1 is a generator set consisting of an engine and an electrical generator. It has an engine rated at 0.55 MMBtu/hr which fires propane and it was manufactured in 2006.

1. BPT Findings

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

Propane

PM	0.000077 lb/MMBtu from AP-42 Table 3.2-2, dated 07/00
PM ₁₀	0.000077 lb/MMBtu from AP-42 Table 3.2-2, dated 07/00
SO ₂	0.000588 lb/MMBtu from AP-42 Table 3.2-2, dated 07/00
NO _x	4.08 lb/MMBtu from AP-42 Table 3.2-2, dated 07/00
CO	0.32 lb/MMBtu from AP-42 Table 3.2-2, dated 07/00
VOC	0.12 lb/MMBtu from AP-42 Table 3.2-2, dated 07/00
Visible Emissions	06-096 C.M.R. ch. 115, BPT

Emission factors were based on the combustion of natural gas as AP-42 does not provide emission factors for the combustion of propane in internal combustion engines.

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

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1 (0.55MMBtu/hr) propane	Negligible	Negligible	Negligible	2.24	0.17	0.06

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

2. 40 C.F.R. Part 60, Subpart JJJJ

Standards of Performance for Spark Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart JJJJ is not applicable to Generator #1 as it was ordered before June 12, 2006, and manufactured before January 1, 2009. [40 C.F.R. § 60.4230]

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

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ is applicable to Generator #1. The unit is considered to be an existing, emergency stationary reciprocating internal combustion engine at an area HAP source and is not subject to New Source Performance Standards regulations. EPA's August 9, 2010 memo (*Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency Stationary RICE in the NESHAP for Stationary RICE*) specifically does not exempt these units from the federal requirements. [40 C.F.R. § 63.6585]

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 63, Subpart ZZZZ, a stationary reciprocating internal combustion engine (RICE) is considered an **emergency** stationary RICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under 40 C.F.R. Part 63, Subpart ZZZZ, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(1) Emergency Situation Operation (On-Site)

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster or equipment failure;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

(i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE more than 100 hours per calendar year.

(ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. **However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.**

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Generator #1 shall be limited to the usage outlined in 40 C.F.R. § 63.6640(f) and therefore may be classified as an existing emergency stationary RICE as defined in 40 C.F.R. Part 63, Subpart ZZZZ. Failure to comply with all of the requirements listed in 40 C.F.R. § 63.6640(f) may cause this engine to not be considered an emergency engine and therefore subject to all applicable requirements for non-emergency engines.

b. 40 C.F.R. Part 63, Subpart ZZZZ Requirements

(1) Operation and Maintenance Requirements

	<u>Operating Limitations</u>
Spark ignition (natural gas, propane) units:	<ul style="list-style-type: none">- Change oil and filter every 500 hours of operation or annually, whichever comes first;- Inspect spark plugs every 1000 hours of operation or annually, whichever comes first, and replace as necessary; and- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

The engine shall be operated and maintained according to the manufacturer's emission-related written instructions, or True Textiles shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 C.F.R. § 63.6625(e)]

(2) Optional Oil Analysis Program

True Textiles has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, True Textiles must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 C.F.R. § 63.6625(i)]

(3) Non-Resetable Hour Meter Requirement

A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 63.6625(f)]

(4) Startup Idle and Startup Time Minimization Requirements

During periods of startup the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 C.F.R. § 63.6625(h) and 40 C.F.R. Part 63, Subpart ZZZZ Table 2d]

(5) Annual Time Limit for Maintenance and Testing

As an emergency engine, the unit shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include

peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). [40 C.F.R. § 63.6640(f)]

(6) Recordkeeping

True Textiles shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. § 63.6655(f)]

F. Process Equipment

1. Stock and Yarn Fiber Dyeing

True Textiles dyes much of the stock and yard fiber used at the facility. Dyeing is a batch process performed by loading the textile substrate (stock and yarn fiber) into a dyeing machine with a solution containing dye. Because the dyes have an affinity for adhesion to the fibers, the dye molecules leave the dye solution and enter the fibers. Auxiliary chemicals and controlled bath conditioners (i.e. temperature and pressure) accelerate and optimize the dyeing process.

In recent years, True Textiles has transitioned to the use of dyes with reformulated chemical compositions and reduced VOC contents; this change has resulted in substantial reductions in actual VOC emissions. True Textiles has therefore requested to reduce its VOC emission limit from the dyeing process from 38.8 tons per year to 32 tons per year. This change is consistent with process adjustments and allows sufficient operational flexibility for further process changes and continued growth. This change also subsequently limits the facility to VOC emissions below the minimum applicability threshold for *Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds*, 06-096 C.M.R. ch 134.

In addition to the VOC emission limit, True Textiles shall be subject to Hazardous Air Pollutants (HAP) emission limits for the dyeing process of 12 tons per year of total HAP and 3 tons per year of any single HAP.

Compliance with the VOC and HAP emission limits shall be demonstrated using a log where VOC and HAP emissions are tracked on a monthly and 12-month rolling total basis.

In previous licenses, True Textiles was required to track VOC and HAP emissions using a mass balance based on facility purchases and inventory, assuming a 100% usage of materials. True Textiles has requested to change the tracking method to calculate VOC and HAP emissions on an as-used basis in order to better align with

current recordkeeping methods employed by the facility. Because calculating emissions on an as-used basis is more accurate than the inventory-based mass balance, the Department has determined that this change represents BPT.

Monthly VOC, total HAP, and single HAP emissions shall be calculated using the following mass balance for each material used in this process:

$$\text{Monthly Emissions} = \sum_{i=1}^n (A_i * X_i)$$

Where,

- A = Amount of each VOC and/or HAP containing material used (mass)
- X = VOC, total HAP, or single HAP content of each material used
- n = Number of different materials used
- i = Subscript denoting an individual material

2. Yarn Texturing

True Textiles operates three yarn texturing machines. The machines draw yarn across a jet of compressed air to roughen the yarn fiber surfaces. Water is applied to the yarn immediately preceding texturing to minimize fiber damage during the process. The tension with which the wetted yarn is processed can be adjusted to increase the length of the yarn as it is being textured.

The yarn texturing operation consists of three machines with a total of 64 spindles. The spindles from each machine vent to a common duct system for each machine. The duct systems for Texturing Machines #1 and #2 exhaust to the atmosphere via a common roof-mounted stack, Stack #10. The duct system for Texturing Machine #3 exhausts to the atmosphere via a second roof mounted stack, Stack #11.

The yarn texturing operation has the potential to emit particulate matter (PM). The PM from this operation is believed to consist of oils and yarn fibers associated with the yarn production. PM emissions from the texturing equipment are calculated using the exhaust flow rates for the texturing machines and an assumed exit grain loading of 0.02 grains per dry standard cubic foot (gr/dscf). It is conservatively assumed that all PM is PM₁₀.

The PM emission limits for the yarn texturing machines are based on the following equation from 06-096 C.M.R. ch. 105(3) for process sources with process rates lower than 60,000 pounds per hour:

$$E = 3.59(P)^{0.062}$$

Where,

E = Particulate Emissions (lb/hr)
P = Process Rate (tons/hr)

The PM emission limits for the yarn texturing machines are the following:

Unit	Pollutant	lb/hr	TPY
YT #1	PM/PM ₁₀	0.64	2.8
YT #2	PM/PM ₁₀	0.47	2.1
YT #3	PM/PM ₁₀	0.86	3.8

Visible emissions from Stacks #10 and #11 shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

3. Steam Drying

True Textiles operates a steam dryer to remove wrinkles from finished textiles. This unit wets incoming fabric using a pad-applicator and then dries the textiles in a steam-heated dryer section. True Textiles operates the dryer primarily with water but at many times it is necessary to apply an aqueous starch compound or other additives with the pad-applicator. The dryer vents into the atmosphere via a roof mounted exhaust stack.

VOC emissions from the steam dryer shall not exceed 2.0 tons per year on a 12-month rolling total basis. Compliance with the VOC emission limit shall be demonstrated using a log of VOC emissions. This log shall include a record of any additive (soap, starch, or other) used in the drying process and the VOC content of each additive. If additives containing VOC are used, the log shall include the amount of VOC that is emitted, determined using the same calculation method as with the dyeing process. The log shall be maintained on a monthly and 12-month rolling total basis.

4. Inspection Stations

True Textiles operates four inspection stations to allow personnel to visually inspect finished textiles for defects, blemishes, and other abnormalities that impact product quality. Blemishes caused by dirt, grease, grime, etc., picked up during manufacturing will be cleaned by hand using a spray-on stain remover and rags.

The inspection process can result in fugitive VOC emissions from the use of stain remover; stain removers used in this process can have VOC contents up to 100% by weight. VOC emissions from the inspection stations shall not exceed 2 tons per year on a 12-month rolling total basis. To demonstrate compliance with this limit, True Textiles shall keep a usage log. The usage log shall include all spray-on stain removers used at the facility and the VOC content of each. If spray-on stain removers containing VOC are used, the log shall include the amount of VOC that is emitted, determined using the same calculation method as with the dyeing process. The log shall be maintained on a monthly and 12-month rolling total basis.

G. Parts Washers

True Textiles makes use of three parts washers to support the maintenance activities at the facility. Two of the parts washers have capacities of 30 gallons and contain ZEP Dyna 143 solvent, and the other has a capacity of 600 ml (0.16 gallons) and contains isopropanol. The parts washers are all subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130 and records shall be kept documenting compliance.

H. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity.

I. General Process Emissions

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

J. Annual Emissions

1. Total Annual Emissions

True Textiles shall be restricted to annual emissions identified within the following tables on a 12-month rolling total basis. The tons per year limits were calculated based on the following:

- 650,000 gallons of distillate fuel combusted per year in the boilers
- 150,000 MMBtu of wood fuel use in Boilers #1 and #2
- 100 hours of operation of Generator #1
- VOC and HAP limits associated with the process

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	Total HAP	Single HAP
Boilers (Distillate)	9.1	9.1	22.8	6.5	1.7	0.1	--	--
Boilers (Wood)	26.3	24.0	1.9	16.5	45.0	1.3	--	--
Generator #1	--	--	--	0.1	0.1	--	--	--
Yarn Texturing	8.7	8.7	--	--	--	--	--	--
Dyeing	--	--	--	--	--	32.0	12.0	3.0
Steam Dryer	--	--	--	--	--	2.0	--	--
Inspection Stations	--	--	--	--	--	2.0	--	--
Total TPY	44.1	41.8	24.7	23.1	46.8	37.4	12.0	3.0

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 C.F.R. Part 52, Subpart A, § 52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 C.M.R. ch. 100, 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).

The quantity of CO₂e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's fuel use limits;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and *Mandatory Greenhouse Gas Reporting*, 40 C.F.R. Part 98; and
- global warming potentials contained in 40 C.F.R. Part 98.

No additional licensing actions to address GHG emissions are required at this time.

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
SO ₂	50
NO _x	50
CO	250

The total annual licensed emissions for the facility are above at least one of the emission levels contained in the table above; however, after taking into consideration the following factors:

- similarity with other licensed sources based on size, emissions, and local topography;
- location, including proximity to other sources, complex terrain and Class I areas; and
- background air quality data available in or representative of the local area,

The Department has determined that an ambient air quality impact analysis is not required for the facility and that Ambient Air Quality Standards (AAQS) will not be exceeded.

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-367-71-N-R/M subject the following conditions.

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

STANDARD CONDITIONS

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

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

1. Within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 2. Pursuant to any other requirement of this license to perform stack testing.
- B. Install or make provisions to install test ports that meet the criteria of 40 C.F.R. Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
- C. Submit a written report to the Department within thirty (30) days from date of test completion.
[06-096 C.M.R. ch. 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- A. Within thirty (30) days following receipt of 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 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 Part 70 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]

SPECIFIC CONDITIONS

(16) **Boilers #1-#5**

A. Distillate Fuel (Boilers #1-#5)

1. Boilers #1-#5 shall not exceed 650,000 gal/yr of distillate fuel use on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]
2. Prior to July 1, 2018, the facility shall fire distillate fuel with a maximum sulfur content not to exceed 0.5% by weight. [06-096 C.M.R. ch. 115, BPT]
3. Beginning July 1, 2018, 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. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur of the fuel delivered. Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT/BACT]

B. Wood Fuel (Boilers #1 and #2)

1. True Textiles is permitted to fire wood fuels in Boilers #1 and #2. The wood fuel shall consist of purchased wood chips or hogged wood, and may contain or be blended with wood byproducts (i.e. bark, sawdust, other biomass, etc.) and ground paper cores prior to firing. The wood fuel fired may also occasionally contain small amounts of cotton swab waste and paper wrappers from True Textiles's wood supplier [06-096 C.M.R. ch 115, BPT]

2. True Textiles shall not fire more than 16,644 tons of wood with a moisture content of 50%, or its equivalent⁴, in Boilers #1 and #2 on a 12-month rolling total basis. [06-096 C.M.R. ch 115, BPT]
3. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel delivered. True Textiles shall also maintain a log to record the quantity and moisture content of wood fuel burned in Boilers #1 and #2. Records of annual fuel use and the usage log shall be kept on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]

C. Emissions shall not exceed the following [06-096 C.M.R. ch. 103]:

Unit	Pollutant	lb/MMBtu
Boiler #1	PM	0.20
Boiler #2	PM	0.20
Boiler #3	PM	0.20
Boiler #5	PM	0.12

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

Unit	Fuel	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	Distillate	3.30	3.30	8.25	2.36	0.59	0.02
	Wood	5.92	5.41	0.42	3.72	10.14	0.29
Boiler #2	Distillate	3.30	3.30	8.25	2.36	0.59	0.02
	Wood	5.92	5.41	0.42	3.72	10.14	0.29
Boiler #3	Distillate	2.56	2.56	6.40	1.82	0.46	0.02
Boiler #4	Distillate	0.34	0.34	1.40	0.40	0.10	0.01
Boiler #5	Distillate	0.42	0.42	1.75	0.50	0.13	0.01

⁴ Equivalent, for the purpose of this limit, represents total Btu. 16,644 tons/yr is based on a heating value of approximately 4,500 Btu/lb for wood with a moisture content of 50% and is equal to 150,000 MMBtu/yr.

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

1. Visible emissions from Stack 1 (shared by Boilers #1 and #3) shall not exceed 20% opacity on a six-minute block average basis when Boiler #1 is firing distillate fuel.
2. Visible emissions from Stack 1 (shared by Boilers #1 and #3) shall not exceed 30% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a three hour period during which time visible emissions shall not exceed 50% opacity when Boiler #1 is firing wood.
3. Visible emissions from Stack 2 (Boiler #2) shall not exceed 20% opacity on a six-minute block average basis when firing distillate fuel.
4. Visible emissions from Stack 2 (Boiler #2) shall not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a three hour period during which time visible emissions shall not exceed 50% opacity when Boiler #2 is firing wood.
5. Visible emissions from Stack 3 (shared by Boilers #4 and #5) shall not exceed 20% opacity on a six-minute block average basis.
6. Visible emissions from the ash handling systems shall not exceed 20% opacity on a six-minute block average basis, during which time visible emissions shall not exceed 30% opacity.

F. Boiler MACT (40 C.F.R. Part 63, Subpart JJJJJ) Requirements for Boilers #1-#5 [incorporated under 06-096 C.M.R. ch. 115, BPT]

1. The facility shall implement a boiler tune-up program. [40 C.F.R. § 63.11223]
 - a. Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

Boiler Category	Tune-Up Frequency
New or Existing Oil, Biomass and Coal fired boilers that are not designated as "Boilers with less frequent tune up requirements" listed below	Every 2 years
New and Existing Oil, Biomass, and Coal fired Boilers with Less Frequent Tune-up Requirements	
Seasonal (see definition § 63.11237)	Every 5 years
Limited use (see definition § 63.11237)	Every 5 years
Oil fired boilers with a heat input capacity of ≤ 5 MMBtu/hr	Every 5 years
Boiler with oxygen trim system which maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune up	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

- b. The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
- (1) As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 C.F.R. § 63.11223(b)(1)]
 - (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]
 - (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 C.F.R. § 63.11223(b)(3)]
 - (4) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
 - (5) Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 63.11223(b)(5)]
 - (6) If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 C.F.R. § 63.11223(b)(7)]
- c. Tune-Up Report: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
- (1) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
 - (2) A description of any corrective actions taken as part of the tune-up of the boiler; and
 - (3) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of

using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

2. Compliance Report

A compliance report shall be prepared by March 1st biennially which covers the previous two calendar years. The report shall be maintained by the source and submitted to the Department and to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

- a. Company name and address;
- b. A statement of whether the source has complied with all the relevant requirements of this Subpart;
- c. A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- d. The following certifications, as applicable:
 - (1) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
 - (2) "No secondary materials that are solid waste were combusted in any affected unit."
 - (3) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

3. Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63; Subpart JJJJJJ including the following [40 C.F.R. § 63.11225(c)]:

- a. Copies of notifications and reports with supporting compliance documentation;
- b. Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
- c. Records of the occurrence and duration of each malfunction of each applicable boiler; and
- d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. [40 C.F.R. § 63.11225(a)(4)(vi)]

(17) Temporary Boilers

-
- A. In the event of a catastrophic event that limits or denies True Textiles the ability to conduct business, such as, but not limited to, a flood or fire, True Textiles may operate temporary, distillate fuel fired rental boilers at their Guilford facility. [06-096 C.M.R. ch. 115, BPT]
- B. True Textiles shall notify the Department if any temporary boilers are used at the facility. [06-096 C.M.R. ch. 115, BPT]
- C. True Textiles shall not use a temporary boiler that is larger than 29.9 MMBtu/hr unless it meets the requirements of "Temporary Boilers" as defined in 40 C.F.R. Part 60, Subpart Dc and in 40 C.F.R. Part 63, Subpart JJJJJ. [06-096 C.M.R. ch. 115, BPT]
- D. The cumulative total maximum input capacity of the temporary boilers shall not exceed the cumulative total MMBtu/hr maximum input capacity of licensed boilers that fire distillate fuel (52.1 MMBtu/hr). [06-096 C.M.R. ch. 115, BPT]
- E. True Textiles shall not use any temporary boiler for more than six months. [06-096 C.M.R. ch. 115, BPT]
- F. Fuel
1. Temporary Boilers employed by True Textiles shall only fire distillate fuel or another, cleaner fuel upon Department approval. [06-096 C.M.R. ch. 115, BACT]
 2. Fuel use by the Temporary Boilers shall be included within the distillate fuel limit for the facility's boilers. If a cleaner fuel is employed, energy input may be used as a substitute to estimate an equivalent distillate fuel use.
 3. Prior to July 1, 2018, the facility shall fire distillate fuel with a maximum sulfur content not to exceed 0.5% by weight. [06-096 C.M.R. ch. 115, BACT]
 4. Beginning July 1, 2018, the facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BACT]
 5. 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 C.M.R. ch. 115, BACT]

G. Emissions shall not exceed the following under applicable conditions:

Unit	Pollutant	lb/MMBtu	For...
Temporary Boilers	PM (filterable)	0.03	each temporary boiler rated higher than 10 MMBtu/hr which is subject to 40 C.F.R. Part 63, Subpart JJJJJ and does not fire ultra-low-sulfur liquid fuel as defined in § 63.11237 [40 C.F.R. Part 63, Subpart JJJJJ, Table 1 and 40 C.F.R. § 63.11210(f)]
Temporary Boilers	PM	0.12	each temporary boiler employed that is rated above 3.0 MMBtu/hr [06-096 C.M.R. ch. 103(2)(B)(1)(a)]

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

Unit	PM ⁵ (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Temporary Boiler	0.12 * C or 0.03 * C	0.12 * C	0.5 * C	$\frac{20 * F}{1,000}$	$\frac{5 * F}{1,000}$	$\frac{0.2 * F}{1,000}$

Where,

- C = Maximum Heat Input Capacity in MMBtu/hr
- F = Maximum Firing Rate in gal/hr

- I. Visible emissions from each Temporary boiler shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]
- J. 40 C.F.R. Part 63, Subpart JJJJJ [incorporated under 06-096 C.M.R. ch. 115, BPT]

Temporary boilers installed by True Textiles may be 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. [40 C.F.R. §§ 63.11193 and 63.11195]

Temporary boilers, as defined in Subpart JJJJJ, are exempt from applicability to this rule via 40 C.F.R. § 63.11195(h).

If the temporary boilers installed do not meet the definition of temporary boilers as expressed in the subpart, True Textiles shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJ applicable to each boiler. Requirements of this

⁵ 0.03 * C If subject to the PM emission limit from 40 C.F.R. Part 63, Subpart JJJJJ, 0.12 * C for all else.

subpart and the definition for temporary boilers are presented in the Findings of Fact of this license.

K. 40 C.F.R. Part 60, Subpart Dc

Temporary boilers installed by True Textiles may be 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]

Temporary boilers, as defined in Subpart DC, are exempt from applicability to this rule via 40 C.F.R. § 60.40c(i). Subpart Dc defines temporary boilers as follows:

If the temporary boilers installed do not meet the definition of temporary boilers as expressed in the subpart, True Textiles shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to each boiler. Potentially applicable requirements of this subpart and the definition for temporary boilers are presented in the Findings of Fact of this license.

(18) **Generator #1**

- A. Generator #1 shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 C.M.R. ch. 115, BPT]
- B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1 (0.55MMBtu/hr) propane	N/A	N/A	N/A	2.24	0.17	0.06

C. Visible Emissions

- 1. Visible emissions from Generator #1 shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]
- D. Generator #1 shall meet the applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ, including the following:
 - 1. True Textiles shall meet the following operational limitations for Generator #1:
 - a. Change the oil and filter annually,
 - b. Inspect spark plugs annually and replace as necessary, and
 - c. Inspect the hoses and belts annually and replace as necessary.

Records shall be maintained documenting compliance with the operational limitations.
[40 C.F.R. § 63.6603(a) and Table 2(d); and 06-096 C.M.R. ch. 115]

2. Oil Analysis Program Option

True Textiles has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, True Textiles must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for each engine. The analysis program must be part of the maintenance plan for each engine. [40 C.F.R. § 63.6625(i)]

3. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on the engine.
[40 C.F.R. § 63.6625(f)]

4. Maintenance, Testing, and Non-Emergency Operating Situations

- a. As an emergency engine, the unit shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise to supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written logs) of all engine operating hours. [40 C.F.R. § 63.6640(f) and 06-096 C.M.R. ch. 115]
- b. True Textiles shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. §§ 63.6655(e) and (f)]

5. Operation and Maintenance

The engine shall be operated and maintained according to the manufacturer's emission-related written instructions, or True Textiles shall develop a maintenance plan which provides to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 63.6625(e)]

6. Startup Idle and Startup Time Minimization

During periods of startup, the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 C.F.R. § 63.6625(h) & 40 C.F.R. Part 63, Subpart ZZZZ Table 2d]

(19) **Process Equipment**

A. Stock and Yarn Fiber Dyeing

1. True Textiles shall limit VOC emissions from the dyeing process to 32.0 tons per year on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]
2. True Textiles shall limit total HAP emission from the dyeing process to 12.0 tons per year on a 12-month rolling total basis [06-096 C.M.R. ch. 115, BPT]
3. True Textiles shall limit emissions of any single HAP or HAP group, as applicable, from the dyeing process to 3.0 tons per year on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]

4. True Textiles shall maintain a log that tracks VOC, total HAP, and single HAP emissions from the dyeing process on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]
5. Monthly VOC, total HAP, and single HAP emissions shall be calculated using the following equation:

$$\text{Monthly Emissions} = \sum_{i=1}^n (A_i * X_i)$$

Where,

- A = Amount of each VOC and/or HAP containing material used (mass)
- X = VOC, total HAP, or single HAP content of each material used
- n = Number of different materials used
- i = Subscript denoting an individual material

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

B. Yarn Texturing

1. Emissions shall not exceed the following for the Yarn Texturing process [06-096 C.M.R. ch 105(3) and 06-096 C.M.R. ch. 115, BPT]:

Unit	Pollutant	lb/hr	TPY
YT #1	PM/PM ₁₀	0.64	2.8
YT #2	PM/PM ₁₀	0.47	2.1
YT #3	PM/PM ₁₀	0.86	3.8

2. Visible Emissions from Stacks #10 and #11 shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

C. Steam Drying

1. True Textiles shall limit VOC emissions from the steam drying process to 2 tons per year on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]
2. True Textiles shall demonstrate compliance with the VOC emissions limit by maintaining a log of VOC emissions. This log shall include a record of any additive (soap, starch, or other) used in the drying process and the VOC content of each additive. If additives containing VOC are used, the log shall include the amount of VOC that is emitted, determined using the same calculation method as

with the dyeing process. This log shall be kept on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]

D. Inspection Stations

1. True Textiles shall limit VOC emissions from the inspection stations to 2.0 tons per year on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]
2. True Textiles shall demonstrate compliance with the VOC emissions limit by maintaining a log of VOC emissions. The usage log shall include all spray-on stain removers used at the facility and the VOC content of each. If spray-on stain removers containing VOC are used, the log shall include the amount of VOC that is emitted, determined using the same calculation method as with the dyeing process. The log shall be kept on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]

(20) **Parts Washers**

Parts washers at True Textiles are subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130.

- A. True Textiles shall keep records of the amount of solvent added to each parts washer. [06-096 C.M.R. ch. 115, BPT]
- B. The following are exempt from the requirements of 06-096 C.M.R. ch. 130 [06-096 C.M.R. ch. 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 06-096 C.M.R. ch. 130.
 1. True Textiles shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 C.M.R. ch. 130]:
 - a. Waste solvent shall be collected and stored in closed containers.
 - b. 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.
 - c. 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.
 - d. The cold cleaning machine shall not be exposed to drafts greater than

- 40 meters per minute when the cover is open.
- e. Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the parts washer.
 - f. 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.
 - g. Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
 - h. Work area fans shall not blow across the opening of the parts washer unit.
 - i. 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 C.M.R. ch. 130]

(21) **Fugitive Emissions**

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

(22) **General Process Sources**

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

(23) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, the licensee shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.

True Textiles, Inc.
Piscataquis County
Guilford, Maine
A-367-71-N-R/M (SM)

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Departmental
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Renewal / Minor Revision

(24) True Textiles 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).

DONE AND DATED IN AUGUSTA, MAINE THIS 22 DAY OF May, 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Paul Mercer
PAUL MERCER, 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: 09/12/2016

Date of application acceptance: 09/14/2016

Date filed with the Board of Environmental Protection:

This Order prepared by Colby Fortier-Brown, Bureau of Air Quality.

