# STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION



PATRICIA W. AHO COMMISSIONER

Bangor Mall LLC Penobscot County Bangor, Maine A-936-71-B-R

# Departmental Findings of Fact and Order Air Emission License Renewal

After review of the air emissions renewal license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., § 344 and § 590, the Department finds the following facts:

## I. REGISTRATION

## A. Introduction

The Bangor Mall in Bangor, Maine has applied to renew their air emission license permitting the operation of emission sources associated with the Bangor Mall's enclosed shopping facility.

The equipment addressed in this license is located at 633 Stillwater Avenue Bangor, Maine.

# B. Emission Equipment

The following pieces of equipment are addressed in this air emission license:

# **Fuel Burning Equipment**

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % sulfur	Stack #
Boiler 1	5.77	41.2 gal/hr	#2 fuel oil,	1 1
(located in Sears)	3.77	11.2 gui/in	0.5% S	
Boiler 2	4.4	31.5 gal/hr	#2 fuel oil,	2
(located in JC Penney)			0.5% S	
Boiler 3	1.54	1495 scf/hr	Natural Gas	3
(located in Macy's)				
Mall HVAC (E)	1.0	970 scf/hr	Natural Gas	HVAC E
Mall HVAC (F)	1.0	970 scf/hr	Natural Gas	HVAC F

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#### Generator

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<u>Equipment</u>	Kilowatt (kW)	Maximum Capacity (MMBtu/hr)	Firing Rate (gal/hr)	Fuel Type, <u>% sulfur</u>	Stack #
Generator #1 (located in Macy's)	55	0.54	3.9	Diesel, 0.05%S	Gen. 1

Note – The Bangor Mall has three additional emergency generators that are under the insignificant activity threshold of 0.5 MMBtu/hr.

# C. Application Classification

The application for the Bangor Mall does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of current licensed emission units only and has been processed through *Major and Minor Air Emission License Regulations*, 06-096 CMR 115 (as amended). The facility is licensed below the major source thresholds and is considered a natural minor for all pollutants including CO<sub>2</sub>e.

# II. BEST PRACTICAL TREATMENT (BPT)

## A. Introduction

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

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. <u>Boiler # 1</u>

Boiler #1 is located in the Sears store and is a #2 oil fired unit rated at 5.77 MMBtu/hr (41.2 gal/hr). The unit was installed in 1978 and exhausts through its own stack.

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Based on the size and age of the boiler, the boiler is not subject to the New Source Performance Standards (NSPS) Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, for units greater than 10 MMBtu/hr manufactured after June 9, 1989. Boiler #1 is less than 10 MMBtu/hr and was manufactured prior to June 9, 1989.

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# 1. BPT Findings

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

PM/PM<sub>10</sub> – 0.08 lb/MMBtu based on 06-096 CMR 115; 0.46 lb/hr

SO<sub>2</sub> – based on firing ASTM D396 #2 fuel oil (0.5% sulfur); 0.5 lb/MMBtu), 2.9 lb/hr

 $NO_x - 0.3$  lb/MMBtu, based on previous license; 1.73 lb/hr

CO – 5 lb/1000 gal: AP-42, Table 1.3-1 (dated 5/10); 0.21 lb/hr

VOC - 0.2 lb/1000 gal: AP-42, Table 1.3-3 (dated 5/10); 0.01 lb/hr

Opacity – Visible emissions from the boiler shall not exceed 20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 3 hour period based on 06-096 CMR 101

Until December 31, 2015, the fuel oil fired in Boiler #1 shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). Per 38 MRSA §603-A(2)(A)(3), beginning January 1, 2016, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm), and beginning January 1, 2018, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm).

#### Periodic Monitoring

Periodic monitoring for the boiler shall include record keeping documenting the total fuel use on a calendar year basis. Documentation shall include the type of fuel used and sulfur content of the fuel.

#### C. Boiler #2

Boiler #2 is located in the JC Penney store and is a #2 oil fired unit rated at 4.4 MMBtu/hr (31.4 gal/hr). The unit was installed in 1993 and exhausts through its own stack.

Based on the size of the boiler, it is not subject to the New Source Performance Standards (NSPS) Subpart Dc for steam generating units (Boiler #2 is less than 10 MMBtu/hr).

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# 1. BPT Findings

A summary of the BPT analysis for Boiler #2 is the following:

PM/PM<sub>10</sub> - 0.08 lb/MMBtu based on 06-096 CMR 115; 0.35 lb/hr

SO<sub>2</sub> – based on firing ASTM D396 #2 fuel oil (0.5% sulfur); 0.5 lb/MMBtu), 2.2 lb/hr

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 $NO_x - 0.3$  lb/MMBtu, based on previous license; 1.32 lb/hr

CO - 5 lb/1000 gal: AP-42, Table 1.3-1 (dated 5/10); 0.16 lb/hr

VOC – 0.2 lb/1000 gal: AP-42, Table 1.3-3 (dated 5/10); 0.01

Opacity – Visible emissions from the boiler shall not exceed 20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 3 hour period on 06-096 CMR 101.

Until December 31, 2015, the fuel oil fired in Boiler #2 shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). Per 38 MRSA §603-A(2)(A)(3), beginning January 1, 2016, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm), and beginning January 1, 2018, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm).

#### Periodic Monitoring

Periodic monitoring for the boiler shall include recordkeeping to document total the fuel use on a calendar year basis. Documentation shall include the type of fuel used and sulfur content of the fuel.

### 2. 40 CFR Part 63 Subpart JJJJJJ

Boiler #1 and #2 may be subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJJ). The two boilers are considered existing oil boilers, rated less than 10 MMBtu/hr.

For informational purposes, a summary of the current applicable federal 40 CFR Part 63 Subpart JJJJJJ (as of December 2011) requirements are listed below. (EPA has proposed amendments to Subpart JJJJJJ which may affect applicability, compliance dates, work practice standards, and other requirements. These amendment are to be finalized in spring of 2012). At this time, the Maine Department of Environmental Protection has not taken delegation of this area source rule promulgated by EPA, however the Bangor Mall may still be subject to the requirements. Notification forms and

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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 as of December 2011.
  - i. Initial Notification of Compliance

An Initial Notification submittal to EPA was due on September 17, 2011. [40 CFR Part 63.11225(a)(2)]

- ii. Boiler Tune-Up Program Initial and Biennial
  - (a) A boiler tune-up program shall be implemented to include the tune-up of applicable boilers by March 21, 2012. [40 CFR Part 63.11196(a)(1)]
  - (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; however, the burner must be inspected at least once every 36 months. [40 CFR Part 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 CFR Part 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. [40 CFR Part 63.11223(b)(3)]
    - 4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 63.11223(b)(4)]
    - 5. Measure the concentration in the effluent stream of CO in parts per million (ppm), by volume, and oxygen in volume percent, before and after adjustments are made. [40 CFR Part 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 one week of start-up. [40 CFR Part 63.11223(b)(7)
  - (c) A Notification of Compliance Status shall be submitted to EPA by July 19, 2012. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(b)]

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(d) The facility shall implement a <u>biennial</u> boiler tune-up program after the initial tune-up and initial compliance report has been submitted.

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- 1. Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up. [40 CFR Part 63.11223(a)]
- 2. The biennial report shall be maintained onsite and submitted to EPA, if requested. The report shall contain the concentration of CO in the effluent stream (ppmv) and oxygen in volume percent, measured before and after the boiler tune-up, a description of any corrective actions taken as part of the tune-up of the boiler, and the type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler. [40 CFR Part 63.11223(b)(6)] The biennial compliance report shall also include the company name and address; a compliance statement signed by a responsible official certifying truth, accuracy, and completeness; and a description of any deviations and corrective actions. [40 CFR Part 63.11225(b)]

# b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63 Subpart JJJJJJ including the following [40 CFR Part 63.11225(c)]: copies of notifications and reports with supporting compliance documentation; 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; documentation of fuel type(s) used monthly by each boiler; the occurrence and duration of each malfunction of the boiler; and actions taken during periods of malfunction to minimize emissions and actions taken to restore the malfunctioning boiler to its usual manner of operation. Records shall be in a form suitable and readily available for expeditious review.

# D. Boiler #3

Boiler #3 is located in the Macy's store and is a natural gas fired unit rated at 1.54 MMBtu/hr. The unit was manufactured in 1997 and installed in 1998.

Based on the size of the boiler, it is not subject to the New Source Performance Standards (NSPS) Subpart Dc for steam generating units (Boiler 3 is less than 10 MMBtu/hr).

A summary of the BPT analysis for Boiler #3 is the following:

PM/PM<sub>10</sub> – 0.05 lb/MMBtu based on 06-096 CMR 115; 0.77lb/hr

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$SO_2$	- 0.06 lb/MMscf: AP-42, Table 1.4-2 (dated 7/98)
$NO_X$	- 100 lb/MMscf: AP-42, Table 1.4-1 (dated 7/98)
CO	- 84 lb/ MMscf: AP-42, Table 1.4-1 (dated 7/98)
VOC	- 5.5 lb/MMscf: AP-42, Table 1.4-2 (dated 7/98)
Opacity	- Visible emissions shall not exceed an opacity of 10% on a six
	(6) minute block average basis, except for no more than one (1)
	six (6) minute block average in a 3 hour period based on 06-096
	CMR 101.

# Periodic Monitoring

Periodic monitoring for the boiler shall include recordkeeping to document total fuel use on a calendar year basis.

Note - Boiler #3 fires natural gas and is not subject to 40 CFR Part 63 Subpart JJJJJJ.

## E. HVAC Units

The HVAC units are part of the Mall air system and each is a 1.0 MMBtu/hr natural gas fired unit. The units were manufactured in 2001 (HVAC E) and 2002 (HVAC F).

A summary of the BPT analysis for each HVAC unit is the following:

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PM/PM<sub>10</sub> – 0.05 lb/MMBtu based on 06-096 CMR 115; 0.05 lb/hr SO<sub>2</sub> – 0.06 lb/MMscf: AP-42, Table 1.4-2 (dated 7/98) NO<sub>X</sub> – 100 lb/MMscf: AP-42, Table 1.4-1 (dated 7/98); 0.1 lb/hr CO – 84 lb/MMscf: AP-42, Table 1.4-1 (dated 7/98); 0.082 lb/hr VOC –5.5 lb/MMscf: AP-42, Table 1.4-2 (dated 7/98); 0.01 lb/hr Opacity – Visible emissions from each unit shall not exceed an opacity of 10% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 3 hour period based on 06-096 CMR 101.
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# F. Back-up Generator #1

The Bangor Mall operates one back-up diesel generator large enough to be licensed. The unit, manufactured in 1997 and installed in 1998, is located in Macy's and is rated at 55 kW. Using an assumed efficiency of 35%, the input capacity is calculated to be approximately 0.54 MMBtu/hr.

The back-up generator shall be limited to 500 hours of operation a year, based on a 12 month rolling total. The Bangor Mall shall keep records of the hours of operation for the unit. The back-up generator is only to be operated for

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maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Back-up generators are not to be used for prime power when reliable offsite power is available. These shall not be operated in a demand response program.

The BPT emission limits for the diesel-fired generator were based on the following:

 $PM/PM_{10} - 0.31 \text{ lb/MMBtu}$ , AP-42, Table 3.3-1 (dated 10/96)

SO<sub>2</sub> – combustion of 0.05% sulfur #2 fuel oil (0.05 lb/MMBtu)

 $NO_X - 4.41$  lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96)

CO – 0.95 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96)

VOC – 0.36 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96)

Opacity – Visible emissions shall not exceed 30% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a 3 hour period based on 06-096 CMR 101.

The federal regulation 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines is not applicable to the emergency generators listed above. The units are considered existing, emergency stationary reciprocating internal combustion engines at an area HAP source, however they are considered exempt from the requirements of Subpart ZZZZ since they are categorized as a commercial emergency engine.

## G. Annual Emissions

The Bangor Mall shall be restricted to the following annual licensed emissions, based on unrestricted hours on the boilers and HVAC units and a 500 hours/year limit on the back-up generator (calculated on a 12 month rolling total):

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

	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Sears Boiler	2	2	13	7.6	0.9	0.04
JC Penney Boiler	1.5	1.5	10.0	5.8	0.7	0.03
Macy's Boiler	0.3	0.3	0.004	0.7	0.6	0.04
HVAC (total for 2)	0.4	0.4	0.005	0.9	0.7	0.05
Generator #1	0.04	0.04	0.007	0.6	0.1	0.05
Total TPY	4.2	4.2	23	15.6	3	0.2

Total CO<sub>2</sub>e emissions are less than 10,000 tons per year, well below the 100,000 tons per year threshold for major sources of green house gases.

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# III.AMBIENT AIR QUALITY ANALYSIS

According to Chapter 115 of the Department's regulations, the level of air quality analyses required for a minor new source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

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#### **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,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-936-71-B-R subject to the following conditions.

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

## STANDARD CONDITIONS

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

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(3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]

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- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]

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(11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

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- A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
  - 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
  - 2. pursuant to any other requirement of this license to perform stack testing.
- B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
- C. submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 115]

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

[06-096 CMR 115]

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

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

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(15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

#### **SPECIFIC CONDITIONS**

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

- A. Boilers #1 and #2 (located in Sears and JC Penney) shall fire #2 fuel oil with a sulfur limit not to exceed 0.05% by weight. Compliance shall be demonstrated by fuel records from the supplier showing the quantity of fuel delivered and the percent sulfur of the fuel delivered (if applicable). Records of annual fuel use shall be kept on a calendar year basis. [06-096 CMR Chapter 115, BPT]
- B. Beginning January 1, 2016, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm). [38 MRSA §603-A(2)(A)(3)]
- C. Beginning January 1, 2018, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]
- D. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1	PM	0.08	06-096 CMR, Chapter 115, BPT
Boiler #2	PM	0.08	06-096 CMR, Chapter 115, BPT

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

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Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	0.5	0.5	2.9	1.7	0.2	0.008
5.77 MMBtu/hr						
Boiler #2	0.4	0.4	2.2	1.3	0.2	0.006
4.4 MMBtu/hr						

F. Visible emissions from Boilers #1 and #2 shall each not exceed 20% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a 3-hour period. [06-096 CMR Chapter 101]

## (17) **Boiler #3**

- A. Boiler #3 (located in Macy's) shall fire natural gas. Compliance shall be demonstrated by fuel records from the supplier and shall be kept on a calendar year basis. [06-096 CMR Chapter 115, BPT]
- B. Emissions shall not exceed the following [06-096 CMR Chapter 115, BPT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #3 1.54 MMBtu/hr	0.08	0.08	0.0009	0.15	0.13	0.008

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

## (18) HVAC Units

A. The two mall HVAC units shall fire natural gas. Records of annual fuel use shall be kept on a calendar year basis. [06-096 CMR Chapter 115, BPT]

B. Emissions from each unit shall not exceed the following [06-096 CMR Chapter 115, BPT]:

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Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
HVAC E	0.05	0.05	0.0006	0.1	0.08	0.005
HVAC F	0.05	0.05	0.0006	0.1	0.08	0.005

C. Visible emissions from each HVAC unit shall not exceed 10% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a 3-hour period. [06-096 CMR Chapter 101]

# (19) Back-up Generator

- A. The Bangor Mall shall limit the Back-up Generator to 500 hr/yr of operation (based on a 12 month rolling total). A non-resettable hour meter shall be maintained and operated on the Back-up Generator. [06-096 CMR Chapter 115, BPT]
- B. The Back-up Generator shall only be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. The Back-up Generator shall not be used for prime power when reliable offsite power is available. A log shall be maintained documenting the date, time, and reason for operation. [06-096 CMR Chapter 115, BPT]
- C. The Back-up Generator shall fire diesel/#2 fuel oil with a sulfur limit not to exceed 0.05% by weight. Compliance shall be based on fuel records from the supplier showing the quantity of fuel delivered and the percent sulfur of the fuel. [06-096 CMR Chapter 115, BPT]
- D. Emissions shall not exceed the following [06-096 CMR Chapter 115, BPT]:

Emission	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Unit	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Generator #1	0.2	0.2	0.03	2.4	0.5	0.2

- E. Visible emissions from the Back-up Generator shall not exceed 30% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a 3-hour period. [06-096 CMR Chapter 101]
- F. Emergency generators are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Emergency generators are not to be used for

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prime power when reliable offsite power is available; nor used to supply power to an electric grid as part of a financial arrangement with an independent system operator (ISO) or another entity.

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(20) The Bangor Mall shall notify the Department within 48 hours and submit a report to the Department on a <u>quarterly basis</u> if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605).

DONE AND DATED IN AUGUSTA, MAINE THIS A DAY OF JOURNAY, 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Jelanie Ly for PATRICIA W AMO, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: <u>April 25, 2011</u>
Date of application acceptance: <u>April 28, 2011</u>

Date filed with the Board of Environmental Protection: This Order prepared by Lisa P. Higgins, Bureau of Air Quality.

