Departmental Findings of Fact and Order Air Emission License

After review of the air emissions license initial 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., Section 344 and Section 590, the Department finds the following facts:

I. <u>REGISTRATION</u>

A. Introduction

SI Development, LLC & Cutts Island Group (SI Development) of Saco, Maine has applied for an Air Emission License, permitting the operation of emission sources associated with their project located in Saco.

B. Emissions Equipment

<u>Equipment ID</u>	Maximum Capacity <u>(MMBtu/hr)</u>	Maximum <u>Firing Rate</u>	Fuel Type, <u>% sulfur</u>	<u>Stack ID</u>	
Bldg. 4, Blr 1	8.162	58.7 gal/hr	#2 Fuel Oil, 0.5%	1	
		7,773 scf/hr	Natural Gas, neg.		
Bldg. 4, Blr 2	8.162	58.7 gal/hr	#2 Fuel Oil, 0.5%	1	
		7,773 scf/hr	Natural Gas, neg.		
Bldg. 3, Blr 1	1.0	10.93 gal/hr	Propane, neg.	2	
Bldg. 3, Blr 2	1.0	10.93 gal/hr	Propane, neg.	3	

Fuel Burning Process Equipment

C. Application Classification

A new source is considered a major source based on whether or not expected emissions exceed the "Significant Emission Levels" as defined in the Department's regulations. The Department has determined the facility is a minor source and the application has been processed through Chapter 115 of the Department's regulations.

.II. <u>BEST PRACTICAL TREATMENT (BPT)</u>

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 Chapter 100 of the Air Regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

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BPT for new equipment requires a demonstration that emissions are receiving Best Available Control Technology (BACT) as defined in Chapter 100 of the Air Regulations. BACT is a top down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Bldg. 4, Blr 1 and Blr 2

Bldg. 4, Blr 1 and Bldg. 4, Blr 2 each have a heat input of 8.162 MMBtu/hr firing #2 fuel oil with an alternative operating scenario of firing natural gas if future conditions allow. These units are not subject to the requirements of EPA NSPS 40 CFR Part 60, Subpart Dc for boilers greater than 10 MMBtu/hr heat input.

BACT for Bldg. 4, Blr 1 and Bldg. 4, Blr 2 while firing #2 fuel oil is the following:

- 1. PM, PM_{10} , NO_x , CO and VOC emission rates were based upon vendor supplied emission data.
- 2. SO₂ emission limits are based on the firing of fuel which meets the criteria in ASTM D396 for #2 fuel oil.
- 3. Visible emissions from Stack 1, which serves both Bldg. 4, Blr 1 and Bldg. 4, Blr 2, shall not exceed 20% opacity on a six (6) minute block average basis, except for one (1) six (6) minute block average in a 3-hour period.

BACT for Bldg. 4, Blr 1 and Bldg. 4, Blr 2 while firing natural gas is the following:

- 1. PM, PM₁₀, SO₂, NO_x, CO and VOC emission rates were based upon vendor supplied emission data.
- 2. Visible emissions from Stack 1, which serves both Bldg. 4, Blr 1 and Bldg. 4, Blr 2, shall not exceed 10% opacity on a six (6) minute block average basis, except for one (1) six (6) minute block average in a 3-hour period.

C. Bldg. 3, Blr 1 and Blr 2

Bldg. 3, Blr 1 and Bldg. 3, Blr 2 each have a heat input of 1.0 MMBtu/hr firing propane. These units are not subject to the requirements of EPA NSPS 40 CFR Part 60, Subpart Dc for boilers greater than 10 MMBtu/hr heat input.

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BACT for Bldg. 3, Blr 1 and Bldg. 3, Blr 2 is the following:

- 1. Use of propane.
- 2. PM, PM_{10} , SO₂, NO_x, and CO emission rates were based upon vendor supplied emission data.
- 3. VOC emission rate is based on AP-42 data dated 10/96 for propane combustion.
- 4. Visible emissions from Stack 2 (Bldg. 3, Blr 1) and Stack 3 (Bldg. 3, Blr 2) each shall not exceed 10% 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.
- D. Facility Emissions (used to calculate the annual license fee)

SI Development has the following annual emissions based on each unit operating 8,760 hours per year.

	PM	PM ₁₀	SO ₂	NOX	CO	VOC
Bldg. 4, Blr 1 oil	0.9	0.9	18.0	8.9	2.5	0.9
Bldg. 4, Blr 2 oil	0.9	0.9	18.0	8.9	2.5	0.9
Bldg. 3, Blr 1	0.02	0.2	0.001	0.67	0.09	0.02
Bldg. 3, Blr 2	0.02	0.2	0.001	0.67	0.09	0.02
Total Tons Per Year	1.8	1.8	36.0	19.1	5.2	1.8

III. <u>AMBIENT AIR QUALITY ANALYSIS</u>

According to the Maine Regulations Chapter 115, 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.

Departmental Findings of Fact and Order Air Emission License

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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-969-71-A-N 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 MRSA §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. [MEDEP Chapter 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. [MEDEP Chapter 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. [MEDEP Chapter 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. [MEDEP Chapter 115]

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- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [MEDEP Chapter 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. [MEDEP Chapter 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. [MEDEP Chapter 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. [MEDEP Chapter 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. [MEDEP Chapter 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - 2. pursuant to any other requirement of this license to perform stack testing.
 - B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. submit a written report to the Department within thirty (30) days from date of test completion.[MEDEP Chapter 115]

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- (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.

[MEDEP Chapter 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. [MEDEP Chapter 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. [MEDEP Chapter 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. [MEDEP Chapter 115]

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SPECIFIC CONDITIONS

(16) **Bldg. 4, Blr 1 and Bldg. 4, Blr 2**

- A. Bldg. 4, Blr1 and Bldg. 4, Blr 2 each may burn fuel which meets the criteria in ASTM D396 for #2 fuel oil or natural gas. [Chapter 115, BACT]
- B. Emissions from Bldg. 4, Blr1 and Bldg. 4, Blr 2 <u>each</u> shall be limited to the following while firing #2 fuel oil [Chapter 115, BACT]:

Pollutant	lb/MMBtu	<u>lb/hr</u>
PM	0.025	0.20
PM ₁₀	n/a	0.20
SO ₂	n/a	4.11
NOX	n/a	2.04
CO	n/a	0.57
VOC	n/a	0.20

C. Emissions from Bldg. 4, Blr1 and Bldg. 4, Blr 2 <u>each</u> shall be limited to the following while firing natural gas [Chapter 115, BACT]:

Pollutant	lb/MMBtu	<u>lb/hr</u>
PM	0.01	0.08
PM ₁₀	n/a	0.08
SO ₂	n/a	0.01
NOX	n/a	0.57
CO	n/a	1.22
VOC	n/a	0.13

- D. While firing #2 fuel oil in Bldg. 4, Blr1 and Bldg. 4, Blr 2, visible emissions from Stack 1 shall not exceed 20% opacity based on a six (6) minute block average basis, except for no more than one (1) six (6) minute block averages in any 3-hour period. [MEDEP Chapter 101]
- E. While firing natural gas in Bldg. 4, Blr1 and Bldg. 4, Blr 2, visible emissions from Stack 1 shall not exceed 10% opacity based on a six (6) minute block average basis, except for no more than one (1) six (6) minute block averages in any 3-hour period. [MEDEP Chapter 101]

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- (17) **Bldg. 3, Blr 1 and Bldg. 3, Blr 2**
 - A. Bldg. 3, Blr 1 and Bldg. 3, Blr 2 each may fire propane only. [MEDEP Chapter 115, BACT]

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B. Emissions from Bldg. 3, Blr 1 and Bldg. 3, Blr 2 <u>each</u> shall be limited to the following [Chapter 115, BACT]:

<u>Pollutant</u>	<u>lb/hr</u>
PM	0.01
PM ₁₀	0.01
SO ₂	0.01
NOX	0.15
CO	0.02
VOC	0.01

- C. Visible emissions from Stack 2 shall not exceed 10 percent 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. [MEDEP Chapter 101]
- D. Visible emissions from Stack 3 shall not exceed 10 percent 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. [MEDEP Chapter 101]

(18) **Payment of Annual License Fee**

SI Development shall pay the annual air emission license fee within 30 days of **May 30th** of each year. Pursuant to 38 MRSA §353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under 38 MRSA §341-D, subsection 3.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2007.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:

DAVID P. LITTELL, 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:	April 11, 2007			
Date of application acceptance:	April 12, 2007			
Date filed with the Board of Environmental Protection:				
This Order prepared by Mark Roberts, Bureau of Air Quality.				