Loring BioEnergy, LLC	**)**	**Department**
Aroostook County	**)**	**Finding of Fact and Order**
Limestone, Maine	**)**	**Air Emission License**
A-880-71-A-N (SM)	**)**	

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

I. REGISTRATION

A. Introduction

1. Loring BioEnergy, LLC (LBE) submitted an application for a new minor source on February 6, 2004. LBE will be located at the former Loring Air Force Base in Limestone, Maine. The project will include a new combustion turbine, combustion turbine generator, duct-fired heat recovery steam generator (HRSG), and a steam turbine generator to produce electric power and process steam for sale.
2. LBE will be designed to produce approximately 55 megawatts (MW) of electric power during the summer and 70 MW during the winter (actual electricity production will vary depending upon atmospheric conditions). LBE will use a combustion turbine capable of firing natural gas and #2 fuel oil with a maximum heat input of approximately 600 MMBtu/hour followed by a nominally rated 300 MMBtu/hr heat recovery steam generator (HRSG) to produce superheated steam.

B. Emission Equipment to be licensed

Fuel Burning Equipment

Equipment	Licensed Capacity (MMBtu/hr)	Fuel Type, %Sulfur	Licensed Firing Rate[2]	Stack # and Stack height
Turbine #1	600[1] 610[1]	Natural Gas #2 fuel oil, 0.05%	600,000 scf/hr 4,357 gal/hr	#1 (100 ft)
Duct Burner	300	Natural Gas #2 fuel oil, 0.05%	300,000 scf/hr 2,143 gal/hr	#1 (100 ft)

[1] Based on ambient temperature of -14^{o} Fahrenheit and base load

[2] Assuming 1000 Btu/scf for gas and 140,000 Btu/gallon for #2 fuel oil

C. Application Classification

A new source is considered major based on whether or not its maximum licensed allowed emissions exceed the "Significant Emission Levels" as given in Maine's Air Regulations. The future maximum licensed allowed emissions are as follows:

Pollutant	Future License (TPY)	Sig.Level (TPY)
PM	98.8	100
PM_{10}	98.8	100
SO_2	77.4	100
NO_x	36.4	100
CO	48.3	100
VOC	40.8	50
H_2SO_4	46.5	100
Ammonia (NH_3)	19.7	100

Therefore, the new source is considered a minor new source with all criteria pollutants below significant emission levels. LBE will be processed under Chapter 115 of the Department's minor source regulations. All criteria pollutant emissions associated with this new source are subject to Best Available Control Technology (BACT) requirements.

D. Acid Rain Program

The proposed combustion turbine and duct-fired HRSG represent a "new utility unit" as defined in 40 CFR Part 72 of EPA's Acid Rain Regulation. A "utility unit" is defined as a fossil fuel-fired combustion device that will supply more than one-third of its potential electrical output capacity (PEOC) and more than 25 MW output to any power distribution system for sale. The Loring plant's PEOC was determined in accordance with 40 CFR Part 72 Appendix D, and found to meet the definition of a utility unit. LBE does not qualify as a new "clean unit" from the Acid Rain Program since the combustion turbine generator will have a nominal electrical generating capacity greater than 25 MW.

LBE's combustion turbine generator is considered an "affected unit" and is considered an "affected source" under the Acid Rain Program. LBE has submitted a Phase II Acid Rain Permit Application to the Department and has published a public notice announcing the selection of a Designated Representative.

Per Title IV, LBE shall:

- acquire SO_2 allowances in the amount of one allowance for each ton of SO_2 emitted;
- install a NOx continuous emission monitoring system (CEMS) that meets the specifications of 40 CFR Part 75;
- name a designated representative to be responsible for submitting compliance monitoring reports and for obtaining necessary allowances on behalf of the facility; and
- submit an acid rain license application to the Department.

E. Part 70 license applicability

As an affected source under the Acid Rain Program, LBE is required by Chapter 140 of the Department's regulations to apply for and obtain a Part 70 license, even though LBE will be a non-major source. LBE will be required to submit an application for an initial Part 70 license within twelve months after initial startup of the plant. LBE's initial Part 70 license will also be considered their acid rain permit.

II. BEST PRACTICAL TREATMENT

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. Descriptions of the applicable requirements are provided below under the appropriate headings.

B. New Emission Units

BPT for new sources and modifications 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.

Project Description

LBE is proposing to construct and operate a combined cycle cogeneration plant at the former Loring Air Force Base in Limestone, Maine. The project will include a new combustion turbine, combustion turbine generator, duct-fired heat recovery steam generator (HRSG), and steam turbine to produce electric power and process steam for sale. LBE is designed to produce approximately 55 Megawatts (MW)

of electric power (net) during the summer and 70 MW (net) during the winter (actual electricity production will vary depending upon atmospheric conditions). The lower rate occurs during warm weather and the higher rating is obtained during the cold winter months.

The generation of electricity by a combined cycle combustion turbine generator set can be described as follows: combustion air enters through the inlet air filters and is compressed by the turbine-driven compressor. Fuel and compressed air are mixed and burned in the combustion section of the turbine, creating a high-pressure, hot gas. This gas is then expanded through the power turbine section where most of its thermal energy is converted to work as it turns the turbine. The combustion turbine drives both the air compressor and the electric generator attached to the combustion turbine. Waste heat from the combustion turbine is routed to a Heat Recovery Steam Generator (HRSG). Supplemental heat is generated through the use of a duct burner at the inlet to the HRSG. Steam generated by the HRSG is (1) routed to the steam turbine generator to produce electricity and (2) sold directly to offsite users.

The maximum heat input capacity for the combustion turbine varies, depending upon ambient temperature, whereas the duct burner will have a maximum heat input capacity of approximately 300 MMBtu/hr. The firing rate of the duct burner will vary based on process steam demands, combustion turbine load, ambient air temperature, and other factors. Under ideal conditions, the duct burner would be fired on a continuous basis throughout the year to maximize process steam sales.

While a specific gas turbine manufacturer has not yet been selected, LBE's application is based on a General Electric (GE) Frame 6 turbine. The proposed turbine is rated at approximately 600 MMBtu/hr and is designed to operate on natural gas and #2 fuel oil. This corresponds to a gas consumption rate of 600,000 cubic feet per hour and a #2 fuel oil firing rate of 4,357 gallons/hour. The gas turbine will be equipped with dry low NOx combustors to minimize emissions of nitrogen oxides (NOx) and other pollutants during gas firing. During oil firing, the turbine will utilize water injection for controlling NOx emissions. The duct burner will be of a low emissions design. In addition to these combustion control technologies, LBE will be equipped with Selective Catalytic Reduction (SCR) for NOx control and an oxidation catalyst for control of carbon monoxide. Emissions of sulfur dioxide and particulate matter will be minimized by using low sulfur fuels, specifically pipeline quality natural gas and #2 fuel oil having a maximum sulfur content of 0.05% by weight.

In addition to the combustion turbine and duct burner, there will be other potential sources of air emissions at LBE, such as general maintenance activities and plant

up-keep. Such activities are exempt from licensing in accordance with Chapter 115, Appendix B, Section A. Also, LBE will be equipped with a mechanical draft cooling tower. The cooling tower is exempt from licensing pursuant to Chapter 115, Appendix B, Section A. LBE will also use an existing 660,000-gallon aboveground fuel oil storage tank for storage of its #2 fuel oil. This tank was constructed prior to July 23, 1984 and has not been modified or reconstructed since this date. Therefore, the tank is not subject to Subpart Kb of EPA's New Source Performance Standards. The potential VOC emissions from the tank are less than one ton per year, thus the tank is exempt from licensing pursuant to Chapter 115, Appendix B, Section B.

New Source Performance Standard (NSPS)

The turbine is subject to New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart GG - Standards of Performance for Stationary Gas Turbines, for which construction is commenced after October 3, 1977.

40 CFR Part 60, Subpart GG establishes the following emission limits:

Pursuant to 40 CFR Part 60.332(a)(1) NO_x is limited based on the following equation:

NO_x $STD = 0.0075 * (14.4/Y) + F,$

where STD is the allowable NO_x emissions (percent by volume at 15% O_2 and on a dry basis), Y is a function of the manufacturer's rated load (kilojoules per watt hour), and F is a function of the fuel-bound nitrogen.

The NSPS establishes a nominal NOx emission limit for LBE of 75 ppmdv at 100% load. Subpart GG also limits the fuel sulfur content to no more than 0.8% by weight. While the NSPS does apply, the proposed BACT is substantially more stringent; compliance with BACT will insure compliance with the NSPS.

NSPS establishes the following emission limit for SO_2 pursuant to 40 CFR Part 60.333:

SO_2: (1) 0.015% by volume @ 15% O_2 on a dry basis, or
(2) the fuel sulfur content shall not exceed 0.8% by weight

The duct-fired HRSG is subject to NSPS Subpart Da, which applies to electric utility steam generating units having a fossil fuel heat input exceeding 250

MMBTU/hour and that are constructed or modified after September 18, 1978. Subpart Da establishes the following emission limits for the duct burner:

- Particulate matter emission limit of 0.03 lbs/MMBTU
- Opacity limit of 20% (6-minute average) except for one 6-minute period per hour of no more than 27%
- SO_2 control not required if uncontrolled emissions are below 0.20 lbs/MMBTU
- NOx emission limit of 1.6 lbs/Megawatt-hour

A summary of the BACT analysis for each of the pollutants is discussed below:

BACT for the Gas Turbine Generator and Duct Burner

Nitrogen Oxides

NOx emitted from combustion sources results from oxidation of both fuel bound nitrogen and atmospheric nitrogen (thermal NOx). Natural gas has very low fuel bound nitrogen so reducing NOx emissions must focus on reducing the thermal NOx. Dry Low NOx (DLN) combustors have become standard equipment on most new turbine installations. The GE dry low NOx combustor provides a staging of combustion, resulting in lean fuel-air mixtures throughout the combustion zone thereby eliminating high flame temperatures and thermal NOx formation. On #2 fuel oil, however, DLN technology has not yet achieved the NOx performance levels attainable using water or steam injection. The injection of water into the combustion zone of a gas turbine reduces the flame temperature and thereby reduces thermal NOx formation. Water injection is currently the state of the art in controlling NOx emissions during #2 fuel oil firing.

Two "add-on" control systems are available to remove NOx emissions from combustion turbine exhaust streams, with selective catalytic reduction (SCR) chosen over SCONOx. In an SCR system an ammonia-based reagent is injected into the exhaust gas to react with nitrogen oxides in the presence of a catalyst, forming nitrogen and water. The reactions occur on the surface of the catalyst. Optimum SCR system operation requires the catalyst temperature to remain within a given range, typically 650 – 800°F for the more common catalyst metals. In combined cycle systems, the catalyst is placed between specific heat recovery steam generator (HRSG) tube sections where, during normal operation, the catalyst temperature remains within the established temperature window. Unlike SCONOx technology, SCR has been used extensively in the power generation industry and is a proven technology.

Use of SCR in conjunction with DLN combustors and water injection is consistent with the most stringent BACT determinations made on recently permitted projects. By using these technologies, the resulting NOx emission concentrations exiting the LBE stack are expected to fall within a range of 3 to 4 ppmdv @ 15% O_2 when firing gas, and 6 to 8 ppmdv @ 15% O_2 when firing #2 fuel oil. The actual NOx concentration at any given time will be dependent on several factors, including gas turbine load, ambient temperature, duct burner firing rate, and nitrogen content of the fuel. This overall NOx emission performance level is consistent with the emission limits cited in the RACT/BACT/LAER Clearinghouse (RBLC) as well as in the air permits issued by Maine and New Hampshire. The maximum predicted NOx emission rate from the LBE stack will be 6.6 pounds per hour during gas firing and 14.1 pounds per hour during oil firing.

Carbon Monoxide

Carbon Monoxide (CO) results from the incomplete combustion of fuel in the turbine. As with other types of combustors, combustion efficiency is optimized at the design load case. DLN combustors are designed to achieve efficient, stable combustion and to minimize emissions of multiple pollutants. CO control is inherently designed into DLN combustion technology. LBE is proposing to install an oxidation catalyst as a means to limit its potential annual emissions of CO to less than 100 tons per year, thereby remaining a minor source. LBE's proposed use of combustion controls and an oxidation catalyst is consistent with the most stringent CO controls employed. The oxidation catalyst system to be used by LBE will achieve a minimum of 80% CO reduction efficiency during normal operations.

By using these technologies, the resulting CO emission concentrations exiting the LBE stack are expected to fall within a range of 8 to 9 ppmdv @ 15% O_2 when firing gas, and 12 to 13 ppmdv @ 15% O_2 when firing #2 fuel oil. The actual CO concentration at any given time will be dependent on several factors, including gas turbine load, ambient temperature, and duct burner firing rate. This overall CO emission performance level is consistent with the permitted levels for the RBLC facilities using an oxidation catalyst. The maximum predicted CO emission rate from the LBE stack will be 10.7 pounds per hour during gas firing and 15.1 pounds per hour during oil firing.

Particulate Matter and PM10

LBE identified several options for potential particulate control including the combustion of clean fuels and good combustion practices. However, add-on

controls such as baghouses, electrostatic precipitators, and scrubbers have not been applied on gas or oil-fired turbine facilities. Add-on controls could create unacceptable back pressure, thus reducing efficiency and increasing fuel usage and the high level of excess air produced by combustion turbines would in turn increase the size and cost of the add-on control, making them economically infeasible.

In developing PM emission rates for the facility, LBE has considered the potential formation of ammonium salts resulting from the presence of both an oxidation catalyst and an SCR system. LBE has also considered the contribution of condensable particulate matter to overall PM_{10} emission rates. The predicted PM_{10} emission rates for LBE are higher when compared to other licensed Maine gas turbine facilities for a couple reasons. The emission rates for LBE for both gas and oil include condensable particulate matter as measured through EPA Method 202. Also, the emission rate for oil firing reflects the ability to fire #2 fuel oil in the duct burner, and reflects the operation of the SCR system during periods of oil firing which contributes to the formation of ammonium salts.

LBE has evaluated and proposed the combustion of clean fuels and good combustion practices as BACT for particulate matter emissions from the combustion turbine. The use of natural gas and low sulfur #2 fuel oil represents the most stringent degree of control.

Sulfur Dioxide (SO_2)

SO_2 emissions are formed from oxidation of sulfur in fuel. Flue gas desulfurization systems have not been applied to natural gas or oil-fired combustion turbine facilities. The only feasible means for controlling SO_2 emissions from combustion turbines is to limit the sulfur content of the fuel. The EPA established NSPS for gas turbines which commenced construction, modification, or reconstruction after October 3, 1977. The NSPS limit for sulfur in fuel is 0.8% by weight.

LBE has committed to burning natural gas and #2 fuel oil. The sulfur content of the natural gas supply for LBE is not expected to exceed 2.0 grains per 100 standard cubic feet of natural gas. The distillate grade (#2) fuel oil to be used in the combustion turbine and duct burner will contain no more than 0.05% sulfur by weight. The low concentrations of sulfur in the fuels render flue gas desulfurization systems unnecessary. Therefore, LBE will use pipeline quality natural gas and low sulfur (0.05% by weight) distillate (#2) fuel oil in both the combustion turbine and duct burner to meet BACT for SO_2 emissions. The maximum predicted SO_2 emission rate from LBE will be 5.4 pounds per hour

during gas firing and 47.3 pounds per hour during oil firing. Oil firing at the facility will be limited to 17,500,000 gallons per year based on a 12-month rolling total. This level of oil utilization equates to approximately 124 days of oil use in both the gas turbine and duct burner.

Volatile Organic Compounds (VOC)

Volatile Organic Compounds are produced by the combustion of fuel in the combustion turbine and duct burner as a result of incomplete combustion. The dry low NOx (DLN) system is a sophisticated system that provides integration of a staged, premixed combustor, with computer controlled air and fuel feed systems, and performance monitoring sensors. The DLN combustors and water injection system to be employed in the combustion turbine to control NOx emissions will also minimize VOC emissions. Similarly, VOC emissions from a duct burner having a modern design will be minimal.

VOCs produced from the combustion of fuel can also be reduced by an oxidation catalyst. The oxidation catalysts used to control CO emissions also reduce VOC, but to a lesser extent. The VOC reduction achieved by an oxidation catalyst is generally regarded as a secondary benefit. To meet BACT, the maximum VOC emission rate from the LBE stack will be 9.9 pounds per hour during gas firing and 13.7 pounds per hour during oil firing.

Ammonia (NH3)

LBE is required to install Selective Catalytic Reduction (SCR) for the control of NOx emissions that has been determined to represent BACT. In SCR, an ammonia-based reagent must be injected into the exhaust gas in quantities that exceed the stoichiometric ratio theoretically required to reduce all of the NOx present. Due to imperfect gas mixing, a small portion of the injected ammonia will be released from the stack as ammonia "slip". Slip levels are controlled through proper SCR operation and maintenance.

Ammonia slip emissions can be controlled to very low levels when operating conditions are relatively steady state. As combustion turbine load and/or duct burner firing rates change, so does the exhaust gas profile and pollutant loading. As the exhaust conditions change and ammonia injection control system adjusts to match the new condition, ammonia slip levels can increase beyond those achievable under steady-state conditions. Consequently, to account for the variability, the Department requires control of ammonia concentrations to less than 20 ppmdv at 15% O_2 based on a 24-hour average and 5 ppmdv at 15% O_2 based on a 30-day rolling average.

Sulfuric Acid Mist (H_2SO_4)

Like SO_2, H_2SO_4 is also produced as a result of the oxidation of sulfur in fuel. A small fraction (typically less than 5%) of the sulfur contained in the fuel fired in the combustion turbine and duct burner will be oxidized to sulfur trioxide (SO_3) during the initial combustion reactions. For power plants using an oxidation catalyst for CO control, it is estimated that roughly one-third of the sulfur dioxide formed during combustion will oxidize to SO_3 as it passes through the oxidation catalyst. Smaller amounts of SO_2 can also be converted to SO_3 as it passes through the oxidation catalyst. A portion of the SO_3 formed by the different mechanisms may dissolve in water vapor present in the exhaust to form H_2SO_4.

The inherently low sulfur content of the fuels to be used in the LBE combustion turbine and duct burner results in H_2SO_4 emission levels that do not warrant further treatment using add-on control technology. The low sulfur fuels will ensure that emissions for sulfuric acid mist are receiving BACT. LBE will utilize both an oxidation catalyst and an SCR system. Therefore, the emission rate of sulfuric acid mist from the LBE stack will depend upon many factors. These include the sulfur level in the fuel, the actual conversion rate of SO_2 to SO_3 across the oxidation catalyst, the conversion rate of SO_3 to ammonium salts, and the exhaust gas temperature profile downstream of the SCR system.

Streamlining

The following is a brief description of the origin of some of the emission limits to which LBE is subject. In the situations where LBE is subject to both a regulatory limit and a BACT or NSPS limit, the most stringent limit is listed within the Order section of this license and compliance with that limit is considered to be a demonstration of compliance with the other limits. The following shows BACT limits which are more stringent and are therefore streamlined in the Order section of this license.

Opacity

LBE accepts streamlining for opacity requirements. Chapter 101, Section 2(B)(1)(a)(i) of the Department's regulations, NSPS Subpart Da, and Best Available Control Technology (BACT) requirements are applicable. The BACT opacity limit is more stringent. Therefore, only the more stringent BACT opacity limit is included in this license.

Particulate Matter

LBE accepts streamlining for particulate matter requirements. Chapter 103(2)(B)(1)(c) of the Department's regulations, NSPS Subpart Da, and BACT requirements are applicable. The BACT particulate matter limit is more stringent. Therefore, only the more stringent BACT particulate matter limit is included in this license.

Sulfur Dioxide

LBE accepts streamlining for sulfur dioxide requirements. 40 CFR §60.333, NSPS Subpart Da, and BACT requirements are applicable. The BACT limit is more stringent. Therefore, only the more stringent BACT sulfur dioxide limit is included in this license.

Nitrogen Oxide

LBE accepts streamlining for nitrogen oxide requirements. 40 CFR §60.332, NSPS Subpart Da, and BACT requirements are applicable. BACT incorporates the NSPS for the gas turbines, therefore only the more stringent BACT nitrogen oxide limit is included in this license.

Periodic Monitoring

Periodic monitoring shall consist of record keeping which includes sulfur content of #2 fuel oil, and continuous monitoring of NOx, ammonia and opacity. LBE shall operate monitors and record the following as specified for each parameter:

Turbine and Duct Burner	**Monitor**	**Record**
Natural gas flow rate	Continuously	1-hr block average
#2 fuel oil flow rate	Continuously	1-hr block average

Continuously is defined as a minimum of two points in a one-hour period.

Facility Emissions and Fuel Use Cap

Facility emissions are based on the operation of LBE's natural gas/oil fired turbine generator along with emissions from the duct burner which can also burn natural gas and oil. LBE is limited to an annual #2 fuel oil consumption rate of 17,500,000 gallons.

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

Pollutant	TPY
PM	98.8
PM_{10}	98.8
SO_2	77.4
NOx	36.4
CO	48.3
VOC	40.8
H_2SO_4	46.5
NH_3	19.7

III. AMBIENT AIR QUALITY ANALYSIS

A. Overview

A combination of screening and refined modeling was performed to show that emissions from LBE, in conjunction with other area sources, will not cause or contribute to violations of Maine Ambient Air Quality Standards (MAAQS) for SO_2, PM_{10}, NO_2 or CO or to Class II increment standards for SO_2, PM_{10} and NO_2.

Since LBE is considered to be a new minor source and the nearest Class I area is approximately 205 kilometers away, no Class I Air Quality Related Values (AQRV) analysis was required.

B. Model Inputs

SCREEN3 screening modeling was performed for 9 operating scenarios to determine the maximum significant impact areas and worst-case operating load(s) in simple, intermediate, and complex terrain (i.e., areas where terrain elevations exceed the proposed stack-top elevations). The ISC-PRIME model (in refined simple terrain mode) was then used to address standards and increments in all areas for the worst-case operating load(s).

All modeling was performed in accordance with all applicable requirements of the Maine Department of Environmental Protection (the Department), Bureau of Air Quality (BAQ) and the United States Environmental Protection Agency (USEPA).

A valid 5-year hourly meteorological off-site database was used for the refined modeling. The wind data was collected at a height of 10.00 meters at the Caribou National Weather Service station meteorological site during the 5-year period 1985-1989. Missing data were interpolated or coded as missing. Surface data collected at Loring Air Force Base were substituted for missing data. Hourly cloud cover, ceiling height and surface wind speed from Caribou NWS were used to calculate stability. Hourly mixing heights were derived from surface and upper air data collected at Caribou NWS station.

Stack parameters used in the modeling for LBE are listed in Table IV-1. The ISC-PRIME modeling analyses accounted for the potential of building wake and cavity effects on emissions from all modeled stacks that are below their full formula GEP stack heights.

Table IV-1 : Stack Parameters

Facility/Stack	Stack Base Elevation (m)	Stack Height (m)	GEP Stack Height (m)	Stack Diameter (m)	NAD83 UTM Easting (km)	NAD83 UTM Northing (km)
Loring BioEnergy, LLC						
• Turbine Stack	210.92	30.48	67.06	3.66	584.273	5198.215

Emission parameters for LBE for MAAQS and increment modeling are listed in Table IV-2. These parameters are based on the following three operating configurations:

- 100% load case (firing oil) at –14° F ambient temperature,
- 50% load case (firing oil) at –14° F ambient temperature and
- 50% load case (firing oil) at 39° F ambient temperature.

For the purpose of determining NO_2 and PM_{10} impacts, all NO_x and PM emissions were conservatively assumed to convert to NO_2 and PM_{10}, respectively.

Table IV-2 : Emission Parameters

Facility/Stack	Averaging Period(s)	SO_2 (g/s)	PM_{10} (g/s)	NO_2 (g/s)	CO (g/s)	Temp (K)	Stack Velocity (m/s)
Loring BioEnergy							
Maximum (100% Turbine Load, -14°F Ambient Temperature, Firing Oil)							
• Turbine Stack	All	5.97	4.51	1.78	1.90	385.93	18.65

Minimum (50% Turbine Load, -14°F Ambient Temperature, Firing Oil)							
• Turbine Stack	All	3.72	2.81	1.11	1.20	381.48	11.17
Minimum (50% Turbine Load, 39°F Ambient Temperature, Firing Oil)							
• Turbine Stack	All	3.39	2.57	1.01	1.10	380.93	10.30

C. Modeled Impacts

ISC-PRIME refined modeling, using 5 years of meteorological data, and CI-VM screening modeling was performed for 3 operating scenarios that represented 1 maximum and 2 minimum operating scenarios for LBE.

The model results for the applicant alone in simple and complex terrain are shown in Tables IV-3 and IV-4, respectively. Maximum predicted impacts that exceed the respective significance level are indicated in boldface type. No further analysis was required for pollutant/terrain combinations that did not exceed their respective significance levels.

TABLE IV-3 : Maximum SCREEN3/ISC-PRIME Simple Terrain Impacts from LBE Alone

Pollutant	Averaging Period	Max Impact ($\mu g/m^3$)	Receptor UTM E (km)	Receptor UTM N (km)	Receptor Elevation (m)	Class II Significance Level ($\mu g/m^3$)
SO_2	3-hour	**77.30**	584.265	5198.205	210.31	**25**
	24-hour	**25.45**	584.475	5198.105	214.88	**5**
	Annual	0.81	584.495	5198.135	216.10	**1**
PM_{10}	24-hour	**19.23**	584.475	5198.105	214.88	**5**
	Annual	0.61	584.495	5198.135	216.10	**1**
NO_2	Annual	0.24	584.495	5198.135	216.10	**1**
CO	1-hour	133.32 *	--	--	--	**2000**
	8-hour	93.32*	--	--	--	**500**

* = SCREEN3 model result

TABLE IV-4 : Maximum SCREEN3 Complex Terrain Impacts from LBE Alone

Pollutant	Averaging Period	Max Impact ($\mu g/m^3$)	Receptor UTM E (km)	Receptor UTM N (km)	Receptor Elevation (m)	Class II Significance Level ($\mu g/m^3$)
SO_2	3-hour	4.09	585.000	5208.250	274.32	**25**

	24-hour	1.14	585.000	5208.250	274.32	**5**
	Annual	0.36	585.000	5208.250	274.32	**1**
PM_{10}	24-hour	0.86	585.000	5208.250	274.32	**5**
	Annual	0.28	585.000	5208.250	274.32	**1**
NO_2	Annual	0.11	585.000	5208.250	274.32	**1**
CO	1-hour	1.50	585.000	5208.250	274.32	**2000**
	8-hour	1.05	585.000	5208.250	274.32	**500**

D. Combined Source Modeling

Because modeled impacts from LBE alone were greater than the significance levels for 3 and 24-hour SO_2 and 24-hour PM_{10} averaging periods, other sources not explicitly included in the modeling analysis must be accounted for by using representative background concentrations for the area. Background concentrations used, were based on conservative northern Maine rural background monitoring data for SO_2 and PM_{10} from data collected in the Dedham area (Bald Mountain Site). These background values are listed in Table IV-5.

TABLE IV-5 : Background Concentrations (µg/m³)

Pollutant	Averaging Period	Background
SO_2	3-hour	52
	24-hour	29
PM_{10}	24-hour	32

As LBE's 3 and 24-hour SO_2 and 24-hour PM_{10} impacts were significant, the Department examined other sources whose impacts would be significant in or near LBE's significant impact area. Due to the applicant's location, extent of the significant impact area and nearby source's emissions, the Department has determined that no other sources would be considered for combined source modeling.

For all pollutant averaging periods, the maximum modeled impacts from the model predicting the highest concentrations were added with conservative background concentrations to demonstrate compliance with MAAQS, as shown in Table IV-6. Because all impacts using this method meet MAAQS, no further modeling analyses need to be performed.

TABLE IV-6 : Maximum Combined Source Impacts

Pollutant	Averaging Period	Maximum Predicted Impact (µg/m³)	Background (µg/m³)	MaximumTotal Impact (µg/m³)	MAAQS (µg/m³)
SO_2	3-hour	77.30	52	129.30	1,150
	24-hour	25.45	29	79.45	230
PM_{10}	24-hour	19.23	32	51.23	150

E. Increment

LBE's maximum increment impacts were predicted using ISC-PRIME (refined) modeling in simple terrain and SCREEN3 (screening) in complex terrain. For addressing increment impacts in intermediate terrain (i.e., terrain above stack-top and below plume centerline), the ISC-PRIME and SCREEN3 were run individually, and the higher of the two increment impacts chosen. Since the source is entirely increment consuming, the increment modeling did not take in account credit for sources that existed in the baseline years (1987 for NO_2 and 1977 for SO_2 and PM_{10}).

Results of the Class II increment analyses are shown in TABLE IV-7. All SO_2, PM_{10} and NO_2 averaging period predicted increment impacts were below maximum allowable Class II increments. Because impacts using this method meet maximum allowable Class II increments, no further Class II increment modeling for LBE needs to be performed. Due to the applicant's location and nearby source's emissions, the Department has determined that no other sources would be considered for combined source Class II increment modeling.

TABLE IV-7 : Maximum Class II Increment Consumption

Pollutant	Averaging Period	Max Impact (µg/m³)	Receptor UTM E (km)	Receptor UTM N (km)	Receptor Elevation (m)	Class II Increment (µg/m³)
SO_2	3-hour	77.30	584.265	5198.205	210.31	512
	24-hour	25.45	584.475	5198.105	214.88	91
	Annual	0.81	584.495	5198.135	216.10	20
PM_{10}	24-hour	19.23	584.475	5198.105	214.88	30
	Annual	0.61	584.495	5198.135	216.10	17
NO_2	Annual	0.24	584.495	5198.135	216.10	25

F. Class I Impacts

Since LBE is considered to be a new minor source and the nearest Class I area is approximately 205 kilometers away, no Class I Air Quality Related Values (AQRV) analysis was required.

G. Summary

It has been demonstrated that the applicant's facility, in its proposed configuration, will not cause or contribute to a violation of any SO_2, PM_{10}, NO_2 or CO averaging period MAAQS. It has also been demonstrated that the applicant's facility in its proposed configuration will not cause or contribute to a violation of any SO_2, PM_{10}, or NO_2 averaging period maximum allowable Class II increments.

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-880-71-A-N (SM) subject to the following conditions:

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 (Title 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]

(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]

(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]

SPECIFIC CONDITIONS

(16) Electric Generating System

A. The Loring BioEnergy facility electric generating system shall consist of a nominal 42 MW combustion turbine generator with dry low NOx combustors along with a duct burner with a maximum heat input capacity of approximately 300 MMBtu/hr. [MEDEP Chapter 115]

B. LBE is licensed to fire both natural gas and #2 fuel oil in the combustion turbine and duct burner. The cumulative total amount of #2 fuel oil that can be fired is limited to 17,500,000 gallons per year based on a 12-month rolling total. The maximum sulfur content of the #2 fuel shall not exceed 0.05% by weight. [MEDEP Chapter 115]

C. Visible emissions from the exhaust stack serving the gas turbine and duct-fired HRSG shall not exceed 10% opacity, measured as 6 minute block averages, except for one 6 minute block average period per hour of not more than 27% opacity. This opacity limit shall not apply during the first four hours following the initiation of cold startup or planned shutdown, provided that operating records are available to demonstrate that the facility was being operated to minimize emissions. [MEDEP Chapter 115, BACT]

i. Compliance with the opacity limit shall be demonstrated through use of a Continuous Opacity Monitor (COMs) which meets the requirements of Chapter 117 of the Department's regulations. [MEDEP Chapter 117]

D. LBE shall operate dry low NOx burners and a Selective Catalytic Reduction (SCR) system to reduce NOx emissions. [MEDEP Chapter 115, BACT]

E. The exhaust from the gas turbine system and duct burner shall be vented through a 100 foot above ground level stack. [MEDEP Chapter 115, BACT]

F. Emissions from the LBE stack shall not exceed the following limits, except during startup, shutdown, and fuel transfer conditions. These limits apply both during duct burner firing, and when the duct burner is not being fired. The emission limits listed for #2 fuel oil apply if either the combustion turbine or the duct burner is firing #2 fuel oil. For any calendar day or portion thereof in which #2 fuel oil is fired in either the combustion turbine or duct burner, the 24-hour block average NOx emission limit for #2 fuel oil shall apply to that calendar day: [MEDEP Chapter 115, BACT]

Pollutant	ppmvd	Natural Gas (lb/hr)	#2 Fuel Oil (lb/hr)	Control Technology
PM_{10} *	--	19.8	35.8	Natural gas/low sulfur distillate
SO_2	--	5.4	47.3	Natural gas/0.05% S fuel limit
NOx	--	6.6 (24-hour block average)	14.1 (24-hour block average)	Dry Low NOx Technology, Water Injection, & SCR
CO	--	10.7	15.1	Oxidation Catalyst & Good Combustion Control
VOC **	--	9.9	13.7	Oxidation Catalyst & Good Combustion Control
NH3	20 @15% O_2 5 @15% O_2	24 hour avg 30-day rolling avg	--	Good Engineering Practices

* as measured using EPA Method 201 or 201A for filterables and EPA Method 202 for condensables
** Expressed as non-methane VOC, as measured using EPA Method 25A

G. Compliance with the PM_{10} lb/hour emission limits shall be determined upon Department request through stack testing in accordance with 40 CFR Part 60,

Appendix A, Method 5 and 40 CFR Part 51, Appendix M. [MEDEP Chapter 115, BACT]

H. Compliance with the SO_2 lb/hour emission limit shall be demonstrated by recording the hourly fuel flow rate of natural gas and oil into the turbine and duct burner on a one (1) hour block average basis and by determining the fuel's sulfur content as required by 40 CFR 60 Subpart GG. [40 CFR 60 Subpart GG]

I. Compliance with the NOx emission limit shall be demonstrated by the use of a continuous emission monitor (CEMS) meeting the performance specifications of 40 CFR Part 60, Appendix B and F, Part 75, Appendix A and B, and MEDEP Chapter 117, as applicable. LBE shall meet the monitoring requirements as specified in 40 CFR Part 60 Subpart GG. [MEDEP Chapter 115 &117, 40 CFR Part 60 Subpart GG]

J. Compliance with the ammonia ppmdv emission limits shall be demonstrated by the use of continuous emission monitors (CEMs). The monitor shall meet the criteria of the appropriate performance specification of 40 CFR Part 60 Appendix B&F, and Part 75, appendices A&B. [MEDEP Chapter 115, BACT]

K. Compliance with the VOC lb/hour emission limit shall be demonstrated upon request of the Department through stack testing in accordance with 40 CFR Part 60, Appendix A, Method 25A. [MEDEP Chapter 115, BACT]

L. Compliance with the CO lb/hour emission limit shall be demonstrated through stack testing in accordance with 40 CFR Part 60, Appendix A, Method 10. [MEDEP Chapter 115, BACT]

(17) Periodic Monitoring

Periodic monitoring shall consist of record keeping which includes sulfur content of #2 fuel oil, and continuous monitoring of NOx, ammonia and opacity. LBE shall operate monitors and record the following as specified for each parameter:

Turbine and Duct Burner	**Monitor**	**Record**
Natural gas flow rate	Continuously	1-hr block average
#2 fuel oil flow rate	Continuously	1-hr block average

Continuously is defined as a minimum of two points in a one-hour period. [MEDEP Chapter 115]

(18) Continuous Emission Monitors (CEMS) and Monitoring:

A. The exhaust system serving the combustion turbine and duct burner shall be equipped with continuous emission monitoring equipment for nitrogen oxides, ammonia, and diluent gas (oxygen or carbon dioxide).
B. The continuous monitors must satisfy the applicable performance specifications in 40 CFR Part 60, Appendices B&F, Part 75, Appendices A&B, and Chapter 117 of the Department regulations.
C. Performance specifications, monitor location, calibration and operating procedures and quality assurance procedures for each monitor must be submitted to the Bureau of Air Quality for review and approval at least 180 days prior to expected start-up.
D. LBE shall notify the Bureau of Air Quality in writing of the date on which the initial performance testing of the CEMS begins at least 30 days prior to such a date.
E. All data shall be monitored and recorded continuously, in accordance with Chapter 117 of the Department regulations.
F. LBE shall maintain records for the gas turbine for:
   i. Hours of operation, including startup, shutdown, and any other down time:
   ii. Malfunctions of the air pollution control system; and
   iii. Quantities of natural gas delivered to the facility on a monthly basis.
G. In the event that LBE uses a split scale NOx CEMS with a lower scale at 1-10 ppm and an upper scale at approximately 10-250 ppm, LBE shall be permitted to modify the calibration method in 40 CFR Part 60, Appendix B & F in order to calibrate their NOx CEMS across two scales, with only one point required to be calibrated in the lower end scale.

[MEDEP Chapter 117]

(19) This facility shall comply with the requirements of the Federal New Source Performance Standards 40 CFR Part 60, Subparts A (General provisions), Subpart GG (Stationary Gas Turbines), and Subpart Da (Electric Utility Steam Generating Units). LBE shall comply with the notification and recordkeeping requirements of 40 CFR Part 60.7. [40 CFR 60 A and Subparts GG and Da]

(20) LBE is subject to the requirements of the Federal Acid Rain Program found in 40 CFR Parts 72 through 78, compliance with all applicable provisions of these regulations is required. LBE has applied for a permit pursuant to 40 CFR, Part 72, as a Phase II Acid Rain facility. [40 CFR, Part 72]

(21) LBE shall obtain and hold in the EPA Allowance Management System, sufficient Acid Rain allowances for each ton of SO_2 emitted annually in accordance with the requirements of 40 CFR, Part 72. [40 CFR, Part 72]

(22) As an affected source under the Acid Rain Program, LBE is required by Chapter 140 of the Department's regulations to apply for and obtain a Part 70 license, even though LBE will be a non-major source. LBE will be required to submit an application for an initial Part 70 license within twelve months after initial startup of the plant. LBE's initial Part 70 license will also be considered their acid rain permit.

(23) Turbine Startup, Shutdown, and Fuel Transfer

A. LBE shall minimize emissions from the gas turbine to the maximum extent practicable during startup and shutdown, fuel transfer, under maintenance or adjustment conditions, during equipment cleaning conditions, and during initial gas turbine commissioning by following proper operating procedures to minimize the emission of air contaminants to the maximum extent practical.

1. Turbine startup shall be defined as that period of time from initiation of combustion turbine firing until the unit reaches steady state load operation. Steady state operation shall be reached when the combustion turbine reaches minimum load (60%) and the steam turbine is declared available for load changes. This period shall not exceed 60 minutes for a hot start, 180 minutes for a warm start, nor 240 minutes for a cold start. A hot start shall be defined as startup when the generating unit has been down for less than 2 hours. A warm start shall be defined as startup when the generating unit has been down for more for more than 2 hours and less than or equal to 48 hours. A cold start shall be defined as startup when the generating unit has been down for more than 48 hours. Unit shutdown shall be defined as that period of time from steady state operation to cessation of combustion turbine firing. This period shall not exceed 60 minutes.

2. Fuel transfer shall be defined as the process of switching the type of fuel that is being fired in the combustion turbine.

3. Initial turbine commissioning shall be defined as the period of time from initial turbine startup to the date of the initial performance test, but not later than 180 days after the initial startup.

4. The emission limitations of Condition (16) shall apply at all times, except during turbine startup/shutdown/fuel transfer conditions for the period of time from the turbine's first fire until the license is amended to incorporate emission limits for startup, shutdown, and fuel transfer conditions. Within twelve months from the initial performance testing required by Condition

(25) the owner/operator shall propose to the Bureau of Air Quality, numerical emission limits to apply during turbine startup, shutdown, and fuel transfer conditions. Continuous emission monitoring and/or stack test data gathered during startups, shutdowns, and fuel transfers, or other methods approved by the Department, shall be used as the basis for these limits.

[MEDEP Chapter 115, BACT]

(24) Ammonia will not be injected into the HRSG during start-up or shutdown unless the catalyst bed is at, or above, the manufacturer's specified minimum operation temperature. [MEDEP Chapter 115]

(25) Performance Tests
LBE shall conduct the initial PM and VOC performance tests per the procedures listed in paragraphs (16)G and (16)K, respectively, within 60 days after achieving the maximum production rate at which the plant will be operated but not later than 180 days after the initial startup. All testing shall comply with all of the requirements of the DEP Compliance Test Protocol and with 40 CFR Part 60, as appropriate, or other methods approved by the Bureau of Air Quality. A representative of the DEP or Environmental Protection Agency (EPA) shall be given the opportunity to observe the compliance testing. [MEDEP Chapter 115]

(26) For Compliance Assurance, LBE shall comply with the following:
The Bureau of Air Quality finds the following Compliance Assurance Plan to be reasonable and appropriate. [MEDEP Chapter 115]

A. Quarterly Reporting
1. The licensee shall submit a Quarterly Report to the Bureau of Air Quality within 30 days after the end of each calendar quarter, detailing the following, for the Control Equipment, Parameter Monitors, Continuous Emission Monitoring Systems (CEMS) required by this license:
   a. All control equipment downtimes and malfunctions;
   b. All CEMS downtimes and malfunctions;
   c. All downtimes of the above specified parameter monitors;
   d. All excess events of emission and operational limitations set by this Order, statute, state or federal regulation, as appropriate; and
   e. A report certifying there were no excess emissions, if that is the case.

2. The following information shall be reported for each excess event:
   a. Standard exceeded;
   b. Date, time, and duration of excess event;

c. Maximum and average values of the excess event, reported in the units of the applicable standard, and copies of pertinent strip charts and print-outs when requested;
d. A description of what caused the excess event;
e. The strategy employed to minimize the excess event;
f. The strategy employed to prevent reoccurrence; and

B. Record-Keeping

1. For all of the equipment parameter monitoring and recording, required by this license, the licensee shall maintain records of the most current six year period and the records shall include:
   a. Documentation which shows monitor operational status during all source operating time, including specifics for calibration and audits; and
   b. A complete data set of all monitored parameters as specified in this license. All parameter records shall be made available to the Bureau of Air Quality upon request.

2. The CEMS required by this license shall be the primary means of demonstrating compliance with emission standards set by this Order, statute, state or federal regulation, as applicable. For all CEMS, the licensee shall maintain records of the most current six year period and the records shall include:
   a. Documentation that all CEMS are continuously accurate, reliable and operated in accordance with Chapter 117, 40 CFR part 51 appendix P and 40 CFR part 60 appendix B&F; and

   b. Upon the written request by the Department, a report or other data indicative of compliance with the applicable emission standard for those periods when the CEMS were not in operation or produced invalid data. In the event the Bureau of Air Quality does not concur with the licensee's compliance determination, the licensee shall, upon the Bureau of Air Quality's request, provide additional data, and shall have the burden of demonstrating that the data is indicative of compliance with the applicable standard.

(27) **Annual Emission Statement**

In accordance with MEDEP Chapter 137, the licensee shall annually report to the Department the information necessary to accurately update the State’s emission inventory by means of:

1) A computer program and accompanying instructions supplied by the Department;

   or

2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017
Phone: (207) 287-2437

The emission statement must be submitted by September 1 or as otherwise specified in Chapter 137.

[MEDEP Chapter 137]

(28) **Payment of Annual Air Emission Fee**

LBE shall pay the annual air emission license fee within 30 days of **July 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 2004.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

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

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application February 6, 2004
Date of application acceptance February 6, 2004
Date filed with the Board of Environmental Protection _____

This Order prepared by Edwin L. Cousins, Bureau of Air Quality