STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Maine Liquid Methane Fuels, LLC.
Penobscot County
Brewer, Maine
A-1038-71-A-N (SM)

Departmental
Findings of Fact and Order
Air Emission License
New License

After review of the air emissions 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

Maine Liquid Methane Fuels, LLC. (MLMF) of Brewer, Maine has applied for a new air emission license to permit the construction and operation of a natural gas liquification facility. MLMF proposes to construct, own, and operate a facility that produces Liquid Methane Fuel (LMF) and Liquid Propane Gas (LPG) from Pipeline Natural Gas (NG) supplied by the Maritimes and Northeast Pipeline (MNPP) for commercial sale.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Fuel Burning Equipment

Equipment	Type of Equipment	Max. Capacity (MMBtu/hr)	Max. Firing Rate (scfh)*	Fuel Type, % sulfur	Stack #
(5) 4 MW Gas Engines	Electrical Generation Units	30.3 (each)	31,909 scfh	natural gas	1-5
Diesel Generator	Back-up Generator	9.2	71 gallons/hr	diesel fuel	6
Heater #1	Hot-Oil Heater	7.0	6,863 scfh	natural gas	7
Heater #2	Hot-Oil Heater	7.0	6,863 scfh	natural gas	8

* standard cubic feet per hour

Process Equipment

Equipment	Max. Process Feed Rate	Pollution Control Equipment	Date of Installation	Stack #
Gas purification in Process Building #1	16 MMScf/day	none	2011	1
Gas purification in Process Building #1	16 MMScf/day	none	2011	2

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 emissions for the new source are determined by the maximum future license allowed emissions, as follows:

Pollutant	Max. Future License (TPY)	Sig. Level
PM	12.9	100
PM_{10}	12.9	100
SO_2	12.5	100
NO_x	43.0	100
CO	61.9	100
VOC	46.7	50

MLMF shall limit HAP emissions from the facility to less than 10 tons per year for a single HAP and 25 tons per year of all HAPs combined. The Department has determined the facility is a minor source and the application has been processed through 06-096 CMR 115 of the Department's regulations. With the established emissions factors, add-on pollution control, and limits set in this license, MLMF is licensed below the major source thresholds and is considered a synthetic minor.

D. Regulatory Overview

Provided in this section is a summary of State and Federal air regulations that apply to the proposed MLMF facility emission sources. The BACT limits established in this air license may be more stringent than what the State or Federal regulation requires.

Maine Air Regulations

06-096 CMR 101 Visible Emission Regulation

This rule establishes opacity limitations for emissions from several categories of air contaminant sources. The hot oil heaters are subject to Section (2)(B)(1)(c), which limits visible emissions from any unit firing natural gas or propane to an opacity of 10 percent on a six-minute block average basis, except for no more than one six-minute block average in a 3-hour period.

The 1 MW diesel generator and the 4 MW gas engines are subject to Section (2)(B)(1)(d) which limits visible emissions to an opacity of 20 percent on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period.

06-096 CMR 103 Fuel Burning Equipment Particulate Emission Standard

This rule applies to all fuel burning equipment that has a rated heat input capacity of 3 MMBtu per hour or greater. The hot oil heaters, 1 MW diesel emergency generator and the 4 MW gas engines will be considered new sources since an application for their licensure is being submitted after December 22, 1982. Specifically, these units will comply with Section 2(B)(1)(a), which establishes a PM limit of 0.12 lb/MMBtu for distillate fuel and gas-fired sources less than 50 MMBtu/hr. More stringent BACT emission limits are proposed for the 1 MW diesel generator and the 4 MW gas engine sets.

06-096 CMR 106 Low Sulfur Fuel Regulation

This rule establishes the maximum sulfur content of fossil fuels allowed to be burned in various air quality control regions in the state unless the source is equipped with SO_2 controls or is subject to more stringent sulfur limitations by other requirements. MLMF is subject to this rule because the 1 MW diesel emergency generator utilizes a liquid fossil fuel. As such, MLMF is limited to a fuel sulfur content of 2.0% by weight in its liquid fossil fuels. 40 CFR Subpart IIII and BACT, however, have been found to be more stringent and MLMF will limit the sulfur content of the diesel fuel to 15 parts per million (ppm).

06-096 CMR 111 Petroleum Liquid Storage Vapor Control

This regulation requires all owners of fixed roof storage tanks, storing gasoline, crude oil or any petroleum liquid whose vapor pressure is greater than 1.52 psia (10.5 kPa) to install floating roofs to reduce the hydrocarbon vapors lost to the atmosphere. MLMF is not subject to this rule because it proposes to store LMF in pressure vessels, not fixed roof storage tanks.

06-096 CMR 112 Bulk Terminal Petroleum Liquid Transfer Requirements

This regulation requires bulk gasoline terminals loading tank trucks or trailers and who dispense 20,000 gallons or more of gasoline per day to install a vapor control system and requires tank truck tightness certification. This rule does not apply to MLMF since the proposed facility will be loading trucks with liquefied methane fuel, not gasoline.

06-096 CMR 115 Major and Minor Source Air Emission License Regulations

This rule specifies who must obtain an air emission license, describes the information an applicant must submit for a license, and describes the standards and criteria that must be complied with during and following the air licensing process. For minor sources such as MLMF, 06-096 CMR 115 serves as an operating licensing program and a pre-construction license review program. The proposed MLMF sources will not operate at a level that will exceed major source thresholds. Therefore, the facility will comply with the minor source licensing procedures found in 06-096 CMR 115.

06-096 CMR 137 Emission Statements

This rule establishes requirements for the reporting of pollutant emissions from stationary sources of air pollution. MLMF will be subject to the reporting requirements of this rule because it will be licensed to emit VOC and NOx in amounts greater than the reporting thresholds of 25 tons per year each. MLMF will be required to submit annual criteria pollutant and greenhouse gas emission statements as well as triennial hazardous air pollutant emission statements.

06-096 CMR 148 Emissions from Smaller Scale Electric Generating Resources

This rule limits emissions of NO_x, SO_2, PM and CO from smaller-scale electric generating units, defined as all non-mobile generators having a capacity equal to or greater than 50 kilowatts (kW) installed on or after January 1, 2005.

The 1 MW diesel generator and 4 MW gas engine sets are exempt from this rule because they are subject to new source review requirements pursuant to Title I, Part C or Part D of the CAA and the Maine State Implementation Plan, as described in 06-096 CMR 148 Section 3(B).

Federal Air Regulations

New Source Performance Standards (NSPS) 40 CFR Part 60

Subpart Dc

Boilers and Heaters – MLMF's hot oil heaters are rated below 10 MMBtu/hr and therefore are not subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

Subpart Kb

LMF Pressure Vessels – Seven liquefied methane fuel pressure vessels will be constructed at the MLMF facility. Subpart Kb of the NSPS regulations would apply to tanks constructed after July 23, 1984 that store volatile organic liquids above a specific size depending on the true vapor pressure of the liquid stored. This Subpart, however, does not apply to the storage tanks because they are pressure vessels operating at a pressure greater than 204.9 kPa (30 psia) without emissions to the atmosphere. Further, a volatile organic liquid is defined as:

> "any organic liquid which can emit volatile organic compounds (as defined in 40 CFR 51.100) into the atmosphere." See 40 CFR § 60.111b.

Methane is specifically excluded from the referenced VOC list (40 CFR § 51.100(s)(1)), so the LMF storage tanks will not be subject to Subpart Kb requirements.

Subpart JJJJ

Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, of the NSPS establishes the standards of performance for stationary spark ignition internal combustion engines (SI ICE). This rule specifies the emission standards, performance test requirements, notification and recordkeeping requirements and other compliance requirements.

The five 4 MW gas engine sets are subject to Subpart JJJJ because they are new SI ICE that will be constructed after June 12, 2006, have a maximum engine power greater than or equal to 500 HP (approximately 5,521 HP for each engine) and will be manufactured on or after July 1, 2007 per §60.423(a)(4)(i).

Subpart IIII

Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, of the NSPS establishes the standards of performance for

stationary compression ignition internal combustion engines (CI ICE). This rule specifies the emission standards, performance test requirements, notification and recordkeeping requirements and other compliance requirements for CI ICE.

The 1 MW diesel generator is subject to Subpart IIII because it is a new CI ICE that will be constructed after July 11, 2005, manufactured after April 1, 2006, and is not a fire pump engine per §60.4200(a)(2)(i). For the purposes of Subpart IIII, the 1 MW diesel generator meets the definition of an "emergency stationary internal combustion engine" because its operation is limited to emergency situations and required testing and maintenance.

Initial Notification: MLMF is not required to submit an initial notification for the 1 MW emergency generator because it will be operated as an emergency unit per 60.4214(b).

Emission Standards: Subpart IIII requires that owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder (approximately 2 liters per cylinder) that are not fire pump engines to comply with the emission standards in §60.4202 for new nonroad CI engines for all pollutants for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

The 1 MW diesel generator will meet the Part 89 certification standard as it is EPA Tier 2 Certified.

Fuel Requirements: Because the 1 MW diesel generator will be in operation after October 1, 2010 and has a displacement less than 30 liters per cylinder, the diesel fuel must meet the requirements of 40 CFR 80.510(b) for nonroad diesel fuel which states that the per-gallon sulfur content cannot exceed 15 ppm for nonroad diesel fuel.

National Emission Standards for Hazardous Air Pollutants 40 CFR Part 63

Subpart ZZZZ

40 CFR Part 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, establishes the emission limitations and operating limitations for hazardous air pollutants (HAPs) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. A major source of HAP emissions is a facility that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year. An area source of HAP emissions is a source that is not a major source. The MLMF facility will be an area source of HAP.

The five 4 MW gas engine sets and the 1 MW diesel generator are subject to 40 CFR Part 63 Subpart ZZZZ because they are stationary RICE located at an area source of HAP emissions. Since the engines will be constructed on or after June 12, 2006 and they are located at an area source of HAP, they are considered new stationary RICE. According to § 63.6950(c), new stationary RICE located at an area source must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR Part 60 Subpart IIII, for compression ignition engines or 40 CFR Part 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under Subpart ZZZZ. MLMF will meet the requirements of Subpart ZZZZ for the 4 MW gas engines by complying with 40 CFR Part 60 Subpart JJJJ and will meet the requirements of 40 CFR Part 63 Subpart ZZZZ for the 1 MW diesel generator by complying with 40 CFR Part 60 Subpart IIII.

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 06-096 CMR 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in 06-096 CMR 100 of the Department's regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Process Description

Maine Liquid Methane Fuels, LLC (MLMF) is submitting this application for a New Minor Source Air Emissions License for its proposed process facility located in the City of Brewer, Maine. MLMF proposes to construct a facility that produces Liquid Methane Fuel (LMF) and Liquid Propane Gas (LPG) from Pipeline Natural Gas (NG) for commercial sale. The proposed facility will deliver up to eight billion Btu's per day to energy-intensive industries, truck fleets, and other users in the interior of Maine. This project will be the first to bring a portion of the natural gas energy that transits the Maine seacoast, by way of the Maritimes and Northeast Pipeline (MNPP), to interior regions.

MLMF will be designed to process a maximum of 32 MMScf of pipeline NG per day. The methane content of the NG from the MNPP varies in content from 78%

to 94%. The MLMF facility will purify, liquefy and fractionate the natural gas to produce a consistent grade of LMF that will be stored and transported as a liquid. LMF purity will vary depending on customers' use but it will be approximately 97% methane, less than 1% ethane, and the balance of the gas is nitrogen and other light hydrocarbons. Each Compressor Building (provisions for 4) will have a maximum output capacity of 85,000 gallons per day (GPD) of LMF motor fuel, or 100,000 GPD of LMF heating fuel. The LMF will be an on-demand production facility with limited onsite storage. The facility will operate 24 hours a day, 7 days a week (24/7).

MLMF will generate its own thermal and electrical energy through the use of five (5) 4 MW reciprocating natural gas-fired engine-generator sets. The gas engines will be arranged in an n + 1 configuration with an initial installation of two engines building out to five at some point in the future. Emissions from the 4 MW engine-generator sets will be controlled using Selective Catalytic Reduction (SCR) and an oxidation catalyst.

NG from the MNPP will be purified in one of two process buildings. Within each process building, the NG is treated with an amine solution in an amine contactor to remove carbon dioxide (CO_2) and sulfur compounds from the NG. The treated gas will then pass through a series of coolers, separators, dryers and particulate filters all designed to remove water, heavier hydrocarbons and other particulate contaminants from the treated gas stream in order to control the quality of the final LMF product. The treated gas is then sent to the "cold box" where it is compressed and cooled and further refined in a demethanizer column, which removes ethane and any remaining heavier hydrocarbons. Once the treated gas is liquefied and of the quality desired by MLMF, it is stored in 35,000 gallon storage tanks prior to being pumped into cryogenic trailer trucks for delivery to customers.

The bottoms product from the amine contactor consists of rich amine with entrained CO_2 and sulfur compounds from the NG. The rich amine stream passes through a flash drum where hydrocarbons are gassed off and used as fuel gas in various process combustion sources. Following the flash drum, the rich amine stream passes through particulate and carbon filters prior to entering the amine still. After contacted with steam, the amine is eventually recycled back for further use.

The water-saturated CO_2 and H_2S stream from the amine still is sent to a scrubber which uses EnviroScrub®, a non-hazardous solvent, to remove odorous H_2S from the stream prior to venting through the common process building vents. The primary constituents being vented from this stream will be CO_2 and water. The spent solvent and removed H_2S, which will be the only liquid by-product from the process, will be stored in 330-gallon Department of Transportation (DOT) totes

and sold to farmers for use as low-grade fertilizer approximately twice a year, or used onsite for dust control.

C. Hot Oil Heaters BACT

The fuel-gas burning units consist of two (2) 7.0 MMBtu/hr hot oil heaters. Potential control technologies for NOx emissions from combustion units include: 1) add-on controls (Selective Catalytic Reduction and Selective Non-Catalytic Reduction), 2) combustion of clean fuels, and 3) combustion control techniques (i.e., low excess air firing, low Nitrogen fuel oil, burner modifications, water/steam injection, and flue gas recirculation).

Nitrogen Oxides (NO_x)

NO_x is generated in one of three mechanisms; fuel NO_x and thermal NO_x and to lesser extent prompt NO_x.

Add-on Controls – Add-on pollution control technology for the reduction of nitrogen oxides (NO_x) includes selective non-catalytic reduction (SNCR) and selective catalytic reduction (SCR), which are primarily used on large industrial and utility boilers. The installation of these pollution control technologies on these low heat input capacity units is not economically feasible.

Good Combustion Practices – The fuel-gas burning units will be maintained so as to limit the formation of thermal NO_x.

MLMF shall follow good combustion practices to control NOx emissions as BACT for the fuel gas burning units.

Particulate Matter (PM & PM_{10})

The hot oil heaters are subject to 06-096 CMR 103, "Fuel Burning Equipment Particulate Emission Standard", because each heater has a rated heat input capacity of 7.0 MMBtu/hr, which is greater than the 3 MMBtu/hr requirement.

Particulate matter (PM) from fuel combustion is formed from non-combustible material (ash) in the fuel and from incomplete combustion. Add-on pollution control equipment for the control of PM includes baghouses, scrubber, and electrostatic precipitators. Due to the relatively small amount of PM emissions, the installation of add-on pollution control equipment is not cost effective. Good combustion refers to the reduction of products of incomplete combustion including PM during operation. Good combustion practices are technically feasible to control PM emissions from furnaces.

MLMF will follow good combustion practices as BACT for PM emissions from the hot oil heaters. The BACT particulate matter limit in this license is more

stringent than 06-096 CMR 103, therefore, by meeting the BACT limit, the facility is meeting this regulation.

Sulfur Dioxide (SO_2)

Sulfur dioxide (SO_2) is formed from sulfur in the fuel during combustion. Pollution control options to reduce the emissions of sulfur dioxide (SO_2) can be achieved through either flue gas desulfurization by means of wet scrubbing whereby a caustic solution is used to remove sulfur from the flue gas, or restricting the sulfur content of the fuel oil. The costs of a wet scrubbing system for the hot oil heaters, including the associated annual operating cost for caustic, energy, operation and maintenance does not make this option economically feasible. The other control option is to limit the sulfur content of the fuel burned in the boilers.

BACT for SO_2 emissions for these units is the combustion of process fuel gas which has an inherently low sulfur content.

Carbon Monoxide (CO) and Volatile Organic Compounds (VOCs)

Carbon monoxide (CO) and volatile organic compound (VOC) emissions result from incomplete combustion of fuels. CO and VOC emissions result when there is insufficient residence time or oxygen available near the hydrocarbon molecule during combustion to complete the final step in hydrocarbon oxidation.

To control VOC and CO emissions from small combustion units, no auxiliary equipment is needed. Properly maintaining the units will keep VOC and CO emissions at a minimum. Proper maintenance includes keeping the air/fuel ratio at the manufacturer's specified setting, and having the proper air and fuel pressures at the burners.

MLMF will apply good combustion efficiency and maintenance practices to control CO and VOCs as BACT for the fuel gas burning units.

BACT Summary for fuel burning units

MLMF will combust natural gas, a relatively clean burning fuel with an inherently low sulfur content as BACT for SO_2 and NOx emissions. MLMF will operate these units according to manufacturer's recommendations and will employ good combustion practices to minimize PM, CO, and VOC emissions.

D. 1 MW Diesel Generator BACT

The 1 MW diesel generator has a maximum heat input capacity of 9.23 MMBtu/hr based on a fuel consumption at 100% load of 71 gallons per hour.

While the 1 MW diesel generator will be used primarily for backup purposes, it will not meet the definition of "emergency generator" in 06-096 CMR 148 because MLMF chooses to limit operation of this unit to 2,000 hours per year, rather than the 500 hours per year that would allow the generator to meet the 06-096 CMR 148 definition of an "emergency generator.". The engine is an EPA Tier 2 certified engine and will be subject to 40 C.F.R. Part 60 Subpart IIII, New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines.

Control of Nitrogen Oxides (NO_x)

Potential control technologies for NO_x emissions from diesel fired engines include:

- add-on controls (Selective Catalytic Reduction);
- combustion control techniques (i.e., injection timing retard, air/fuel ratio optimization, cooled intake air); and
- combustion of clean fuels.

A detailed review of EPA's RACT/BACT/LAER Clearinghouse (RBLC) is found in Table 5-3 of MLMF's application addendum dated October 2010.

According to data obtained from the RBLC, BACT for most engines of this size includes good combustion practices, and meeting a Tier 2 emission limit for NOx of 6.4g/kW-hr. The 1 MW diesel generator will meet the EPA Tier 2 and is not subject to 06-096 CMR 148, *Emissions from Smaller Scale Electrical Generating Resources.*

In addition, MLMF provided in their October 2010 application a detailed economic analysis of installing SCR for this engine. According to the engine manufacturer, an SCR system added to the 1 MW diesel generator would cost greater than the cost of the engine itself ($180,000). Applying the 06-096 CMR 148 emission standard of 1.5 lb/MW-hr to the 1 MW diesel generator (based on 2,000 hours per year of operation) and comparing this to the emission limitation proposed of 5.5 g/kW-hr (12.13 lb/MW-hr) results in an annual difference in emissions of approximately 12 tons per year. The cost of a control system to reduce 12 tons per year of NOx emissions is not economically justifiable especially given that this engine will be limited in operation and that other recent BACT determinations in the United States have found meeting the Tier 2 emission limits to be BACT for limited use engines.

Based on data found in the RBLC and the economically unjustifiable cost of reducing emissions to meet the 06-096 CMR 148 NOx emission standard, MLMF will meet BACT by good combustion practices, limiting operation to 2,000 hours per year, and meeting an emission limit of 5.5 g/kW-hr (which exceeds EPA Tier 2 standards) for the 1 MW diesel generator.

Control of Carbon Monoxide (CO)

Carbon monoxide (CO) emissions result from incomplete combustion of fuels. CO emissions result when there is insufficient residence time or oxygen available near the hydrocarbon molecule during combustion to complete the final step in hydrocarbon oxidation.

Potential control technologies for CO emissions from diesel fired engines include: 1) add-on controls (Catalytic Oxidation) and 2) combustion control techniques (i.e., injection timing retard, air/fuel ratio optimization, cooled intake air).

A complete review of the RBLC identified the emission limits and control techniques and can be found in MLMF's application addendum dated October 2010. According to data obtained from the RBLC, BACT for most engines of this size includes good combustion practices, and meeting a Tier 2 emission limit for CO of 3.5g/kW-hr. The emission limits established for the 1 MW diesel generator will be at least as stringent as the EPA Tier 2 limits.

In addition, Maine DEP has determined that while the 1 MW diesel generator is not subject to 06-096 CMR 148, *Emissions from Smaller Scale Electrical Generating Resources*, the emission standards in that regulation for non-emergency generators should be reviewed for BACT. The emission standard for CO for generators installed after January 1, 2009 is 2.0 lb/MWh per 06-096 CMR 148 Section 5(B). According to the engine manufacturer, in order to achieve this CO emission standard, an oxidation catalyst system would have to be added to the 1 MW engine. Applying the 06-096 CMR 148 emission standard to the 1 MW diesel generator (based on 2,000 hours per year of operation) and comparing this to the emission limitation proposed of 1.44 g/Kw-hr (3.17 lb/MW-hr) results in an annual difference in emissions of approximately 1 ton per year. The cost of an oxidation catalyst system to reduce 1 ton per year of CO emissions is not economically justifiable especially given that this engine will be limited in operation and that other recent BACT determinations in the United States have found meeting the Tier 2 emission limits to be BACT for limited use engines.

Based on data found in the RBLC and the economically unjustifiable cost of reducing emissions to meet the 06-096 CMR 148 CO emission standard, MLMF will meet BACT by good combustion practices, limiting operation to 2,000 hours per year, and meeting an emission limit of 1.4 g/kW-hr (which is more stringent than EPA Tier 2 standards) for the 1 MW diesel generator.

Control of Volatile Organic Compounds (VOCs)

Volatile Organic Compound (VOC) emissions result from incomplete combustion of fuels. VOC emissions result when there is insufficient residence time or oxygen

available near the hydrocarbon molecule during combustion to complete the final step in hydrocarbon oxidation.

Potential control technologies for VOC emissions from diesel fired engines include: 1) Combustion Control Techniques (i.e., injection timing retard, air/fuel ratio optimization, cooled intake air); and 2) Add-on controls (Catalytic Oxidation).

Provided that potential VOC emissions from the 1 MW engine are 0.54 TPY, add-on pollution control equipment is not economically justifiable. To control VOC emissions from industrial fuel combustion units, no auxiliary equipment is needed. Properly maintaining the units will keep VOC emissions at a minimum. Proper maintenance includes keeping the air/fuel ratio at the manufacturer's specified setting, and having the proper air and fuel pressures at the burners.

BACT is good combustion efficiency and maintenance practices to control VOCs and meeting an emission limit of 0.22 g/kW-hr for the 1 MW diesel generator.

Control of Particulate Matter (PM)

PM from fuel combustion is formed from non-combustible material (ash) in the fuel and from incomplete combustion. Potential control technologies for PM emissions from diesel engines include: 1) add-on control (i.e., baghouse, scrubber, electrostatic precipitation, etc.); 2) combustion of clean fuels; and 3) implementation of good combustion practices.

According to data obtained from the RBLC, BACT for most engines of this size includes good combustion practices, and meeting a Tier 2 emission limit for PM of 0.2 g/kW-hr. Based on data found in the RBLC and the economically unjustifiable cost of add-on control technology, BACT is good combustion practices, the use of clean fuels (ultra low sulfur diesel), limiting operation to 2,000 hours per year, and meeting an emission limit of 0.131 g/kW-hr (0.32 lb/hr), which is more stringent than EPA Tier 2 standards.

Control of Sulfur Dioxide (SO_2)

Based on a review of the RBLC, the only control technique identified for internal combustion engines regarding SO_2 emissions is the combustion of low sulfur fuel. 40 CFR Part 60 Subpart IIII requires that this engine utilize ultra low sulfur diesel fuel (15 ppm). BACT for SO_2 is the combustion of ultra low sulfur diesel fuel. The facility will operate the 1 MW diesel generator according to manufacturer's recommendations and will employ good combustion practices.

E. 4 MW Gas Engine Sets BACT

MLMF is proposing to install five 4 MW gas engine sets to supply self-generated electrical energy to the facility. MLMF initially plans to construct two gas engine sets operated in an n + 1 configuration and build out to five as the facility approaches full processing capacity. At full processing capacity, MLMF will limit operation of the engine generators to no more than four operating at a time, leaving one set to be used as a spare. Each GE Jenbacher unit will combust natural gas and have a maximum heat input capacity of 30.3 MMBtu/hr at 100% load and assuming a heating value for natural gas of 950 Btu/scf.

Each GE Jenbacher unit will be equipped with a Steuler model CERNOx-J624G01/5521 SCR/Oxidation catalyst to control NOx, CO and VOC to below facility-wide major source thresholds. Per vendor guarantee, the control technology system is designed to provide control efficiencies of at least 90% for NOx and CO each and 50% for VOC. The SCR system will utilize urea to convert NOx to nitrogen and water and the equipment vendor has guaranteed NH3 slip levels below 10 ppmvd.

Identification of Potentially Available Control Technologies

The technologies listed in the table below are determined to be potentially available control technologies for emissions from natural gas engines. The technologies are listed by order of effectiveness and described in greater detail in following subsections.

Potentially Available Emissions Control Technologies from Natural Gas Engines

Pollutant	Control Technology
NO_x	1. Selective Catalytic Reduction 2. Combustion Control Techniques 3. Clean Fuels
CO	1. Oxidation Catalyst 2. Good combustion practices
VOCs	1. Oxidation Catalyst 2. Good combustion practices
PM/PM_{10}	1. Good Combustion Practices 2. Clean Fuels
SO_2	1. Low Sulfur Fuels

Control of Nitrogen Oxides (NO_x)

A review of the RBLC identified the emission limits and control techniques for NOx control from natural gas engines and can be found in MLMF's application dated October 2010.

According to data obtained from the RBLC, BACT for most engines of this size includes good combustion practices, lean burn technology and meeting 40 CFR Part 60 Subpart JJJJ emission limit for NOx of between 1 and 2 g/bhp-hr. The 4 MW gas engine sets employ LEANOX ® combustion control technology. LEANOX lean mixture combustion control, developed by GE and patented worldwide, ensures the correct air/gas ratio under all operating conditions to minimize exhaust gas emissions while maintaining stable engine operation. According to the manufacturer's emission guarantee, uncontrolled NOx emissions from the 4 MW gas engine sets are 1.1 g/bhp-hr which meets the BACT emission limit found in the RBLC, absent of control technology. However, the facility has found it practicable to install SCR systems on the 4 MW gas engines in order to keep facility emissions below the major source threshold.

Based on data found in the RBLC and installing SCR systems to reduce NOx emissions, BACT is good combustion practices, LEANOX® technology, the application of an SCR system, and meeting a post-control emission limit of 1.34 lb/hr (0.11 g/bhp-hr) for each of the 4 MW gas engine sets.

Control of Carbon Monoxide (CO)

Carbon monoxide (CO) emissions result from incomplete combustion of fuels. CO emissions result when there is insufficient residence time or oxygen available near the hydrocarbon molecule during combustion to complete the final step in hydrocarbon oxidation.

Potential control technologies for CO emissions from diesel fired engines include: 1) add-on controls (Catalytic Oxidation); and 2) combustion control techniques (i.e., injection timing retard, air/fuel ratio optimization, cooled intake air).

According to data obtained from the RBLC, BACT for most engines of this size includes good combustion practices, and use of an oxidation catalyst to reduce CO emissions to levels below what is required by 40 CFR Part 60 Subpart JJJJ (between 2 and 4 g/bhp-hr). According to the manufacturer's emission guarantee, uncontrolled CO emissions from the 4 MW gas engines are 2.5 g/bhp-hr each which do not meet BACT emission limits found in the RBLC, thus an oxidation catalyst is required to both achieve BACT and to reduce facility emissions to below major source thresholds.

Based on data found in the RBLC and installing oxidation catalysts to reduce CO emissions, BACT is good combustion practices, the application of an oxidation

catalyst system, and meeting a post-control emission limit of 3.04 lb/hr (0.25 g/bhp-hr) for each of the 4 MW gas engine sets.

Control of Volatile Organic Compounds (VOC)

Volatile organic compound (VOC) emissions result from incomplete combustion of fuels. VOC emissions result when there is insufficient residence time or oxygen available near the hydrocarbon molecule during combustion to complete the final step in hydrocarbon oxidation.

Potential control technologies for VOC emissions from natural gas fired engines include: 1) add-on controls (Catalytic Oxidation); and 2) combustion control techniques (i.e., injection timing retard, air/fuel ratio optimization, cooled intake air).

According to data obtained from the RBLC, BACT for most engines of this size includes good combustion practices, and use of an oxidation catalyst to reduce VOC emissions to levels below what is required by 40 CFR Part 60 Subpart JJJJ (between 0.7 and 1 g/bhp-hr). According to the manufacturer's emission guarantee, uncontrolled VOC emissions from the 4 MW gas engines are 0.43 g/bhp-hr each which meet BACT emission limits for those units not required to install an oxidation catalyst for VOC control pursuant to 40 CFR Part 63 Subpart ZZZZ. MLMF has found it practicable to install an oxidation catalyst to reduce facility emissions to below major source thresholds.

Based on data found in the RBLC and installing oxidation catalysts to reduce VOC emissions, BACT is good combustion practices, the application of an oxidation catalyst system, and meeting a post-control emission limit of 2.62 lb/hr (0.22 g/bhp-hr) for each of the 4 MW gas engine sets.

Control of Particulate Matter (PM)

PM from fuel combustion is formed from non-combustible material (ash) in the fuel and from incomplete combustion. Potential control technologies for PM emissions from natural gas engines include: 1) add-on control (i.e., baghouse, scrubber, electrostatic precipitation, etc.); 2) combustion of clean fuels; and 3) implementation of good combustion practices.

A review of EPA's RACT/BACT/LAER Clearinghouse (RBLC) determined that there are no add-on control technologies in place for gas engines of this size and the only BACT emission limit in place was based on the PM emission factor derived from EPA AP-42 Table 3.2-2, Uncontrolled Emission Factors for 4-Stroke Lean Burn Engines. Potential emissions of PM from each of the 4 MW engines is approximately 1.3 tons per year and the cost of add-on control technology would not be economically justifiable considering that MLMF is proposing the use of this same emission factor for PM.

Based on data found in the RACT/BACT/LAER clearinghouse, BACT is good combustion practices, the use of clean fuels (ultra low sulfur diesel), and meeting an emission limit of 0.3 lb/hr for each of the 4 MW gas engine sets.

Control of Sulfur Dioxide (SO_2)

Based on a review of the RACT/BACT/LAER Clearinghouse database, the only control technique identified for internal combustion engines regarding SO_2 emissions is the combustion of low sulfur fuel. MLMF is not aware of any add-on controls that have been installed for SO_2 from an internal combustion engine and therefore concludes that add-on controls are not considered potential BACT for the 4 MW gas engines.

BACT for SO_2 emissions is the combustion of natural gas which is an inherently low sulfur fuel for each of the 4 MW gas engines.

F. Liquified Methane Fuel Process BACT and HAP limit

The LMF process has the potential to emit HAPs due to the presence of sulfur compounds, primarily carbonyl sulfide, present in the natural gas. The MNPP tariff currently guarantees a maximum total sulfur content in the natural gas of 10 grains per scf and the future MNPP pipeline tariff will guarantee a maximum total sulfur content of 0.5 grains per scf. Potential emissions of sulfurous HAPS are reduced by the rich amine stripping process in which rich amine is contacted with steam to return the amine to a lean state for re-use. This process also converts most of the sulfurous HAP to H_2S, which is an odor-causing compound, but is not a HAP or VOC.

MLMF will limit emissions of HAP from the facility to less than 10 TPY for a single HAP and 25 TPY for all HAPs combined. MLMF proposes that this emission limit represent BACT for the control of HAPs from the facility.

G. Storage Tanks BACT

The two significant types of emissions from fixed roof tanks are storage and working losses. Storage loss is the expulsion of vapor from a tank through vapor expansion and contraction, which are the result of changes in temperature and barometric pressure. This loss occurs without any liquid level change in the tank. Working loss is the combined loss from filling and emptying. Evaporation during filling operations is a result of an increase in the liquid level in the tank. As the liquid level increases, the pressure inside the tank exceeds the relief pressure and vapors are expelled from the tank. Evaporative loss during emptying occurs when air drawn into the tank during liquid removal becomes saturated with organic vapor and expands, thus exceeding the capacity of the vapor space.

According to EPA AP-42, Section 7.1.1.6: Pressure Vessels, high pressure (defined as a pressure greater than 15 psig) storage tanks can be operated so that virtually no evaporative or working losses occur. In addition, the contents of the tanks will consist of 97% methane which is not considered to be a HAP or volatile organic compound (VOC). Emissions of VOCs from the pressure vessels are expected to be minimal.

To meet BACT, MLMF will store the liquified methane fuel in high pressure storage vessels that meet American Society of Mechanical Engineers (ASME) code design, fabrication, inspection testing and certification requirements.

H. General Process Emissions

Visible emissions from any general process source shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

I. Annual Emissions

MLMF shall be restricted to the following annual emissions, based on a 12 month rolling total:

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

Emission Unit	Annual Emissions (TPY)						
	PM/PM10	SO2	NOx	CO	VOC	HAP	NH3
(2) 7 MMBtu/hr Hot Oil Heaters	7.3	0.1	6.0	5.1	0.3	0.1	-
1 MW Diesel Generator	0.3	12.1	13.5	3.5	0.5	0.1	-
(5) 4 MW Gas Engines	5.3	0.3	23.5	53.3	45.9	9.9	4.5
(7) 35,000 Gal LMF Tanks	-	-	-	-	Neg.	-	-
LMF Processing	-	-	-	-	-	4.2	-
Facility-wide Emissions	**12.9**	**12.5**	**43.0**	**61.9**	**46.7**	**14.3**	**4.5**

III. AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations 06-096 CMR 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.

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-1038-71-A-N subject to the following conditions.

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

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 CMR 115]

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

(4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]

(5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353. [06-096 CMR 115]

(6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]

(7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]

(8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]

(9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]

(10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]

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

A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
   1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
   2. pursuant to any other requirement of this license to perform stack testing.

B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. submit a written report to the Department within thirty (30) days from date of test completion.
[06-096 CMR 115]

(12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 115]

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

(14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect 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]

(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) Hot Oil Heaters

A. The two 7.0 MMBtu/hr hot oil heaters shall fire natural gas (potential ton per year emissions were based on each unit operating a maximum of 8,760 hours per year) and shall not exceed the following short-term emission limits:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Heater #1	PM	0.05	06-096 CMR 115, BACT
Heater #2	PM	0.05	06-096 CMR 115, BACT

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

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Heater #1	0.35	0.35	0.01	0.69	0.58	0.04
Heater #2	0.35	0.35	0.01	0.69	0.58	0.04

C. Visible emissions from each hot oil heater shall not exceed 10% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

(17) 1 MW Diesel Generator

A. The 1 MW generator shall fire only diesel fuel with a maximum sulfur content not to exceed 15 ppm. [40 CFR 60.4207(b)]

B. Compliance with the sulfur content limits shall be based on fuel records from the supplier showing the type of fuel delivered and the sulfur content of the fuel. [06-096 CMR 115, BACT]

C. The unit shall be limited to 100 hr/yr of operation for maintenance checks and readiness testing and shall be limited to 2000 hours per year of total operation. Both of these limits are based on a 12 month rolling total. Compliance shall be demonstrated by a written log of all operating hours.
[40 CFR 60.4211(E) and 06-096 CMR 115, BACT]

D. The 1 MW diesel generator shall be equipped with a non- resettable hour meter. [40 CFR 60.4209(a)]

E. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
1 MW Generator	PM	0.12	06-096 CMR 103(2)(B)(1)(a)

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

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
1 MW Generator	0.32	0.32	12.09	13.5	3.54	0.54

G. Emission factors for NOx, CO, VOC and PM are based on manufacturer's testing. Compliance with these emission requirements shall be demonstrated by certification from the manufacturer that these engines meet the appropriate Tier standards. [06-096 CMR 115, BACT & 40 CFR 60, Subpart IIII]

H. MLMF shall operate and maintain this unit in accordance with the manufacturer's written instructions. MLMF shall not change settings that are not approved in writing by the manufacturer. [40 CFR 60.4211(a)]

I. Visible emissions from the 1 MW generator shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

(18) **4 MW Reciprocating Gas Engine Sets**

A. Each 4 MW generator with a maximum heat input capacity of 30.3 MMBtu/hr shall fire only natural gas. MLMF shall limit gas engine set operation to no more than four units operating simultaneously. [06-096 CMR 115, BACT]

B. Each unit shall be equipped with a SCR/Oxidation Catalyst to control NOx, CO and VOC. The SCR system will utilize urea to convert NOx to nitrogen and water and shall limit NH_3 slip levels to 10 ppmvd or less. [06-096 CMR 115, BACT]

C. Emissions from the 4 MW gas engine-generator sets will exhaust through separate 37.5 foot stacks (60% of Good Engineering Practice (GEP) height). [06-096 CMR 115, BACT]

D. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
4 MW Generator (each)	PM	0.12	06-096 CMR 103(2)(B)(1)(a)

E. Emissions from each 4 MW gas engine set were calculated based on the unit operating a maximum of 8,760 hours per year. Emissions from each 4 MW generator set (after being treated with SCR and the oxidation catalyst) shall not exceed the following: [06-096 CMR 115, BPT]

	PM/PM10	SO2	NOx	CO	VOC	NH3	HAP
Emission Rate (lb/hr)	0.30	0.02	1.34	3.04	2.62	0.26	0.57
Potential to Emit (TPY)	1.31	0.08	5.86	13.33	11.46	1.12	2.49

- Potential emissions of NOx, CO and VOC from the 4 MW gas engine sets are calculated based on the vendor guaranteed uncontrolled emissions after application of control technology with guaranteed destruction efficiencies.
- Emission factors for SO_2 and PM/PM_{10} are derived from EPA AP-42 Table 3.2-2, Uncontrolled Emission Factors for 4-Stroke Lean Burn Engines.
- NH_3 emissions are calculated based on the vendor guarantee of NH_3 concentration of 10 ppmvd or less.

F. Compliance with the lb/hour emission limits shall be demonstrated upon request of the Department through stack testing in accordance with the appropriate Methods prescribed in 40 CFR Part 60, Appendix A. An initial compliance stack test for NOx, CO, and VOC shall be conducted within 180 days after startup. [06-096 CMR 115, BACT]

G. MLMF shall operate and maintain each unit in accordance with the manufacturer's written instructions. MLMF shall not change settings that are not approved in writing by the manufacturer. [40 CFR 60.4211(a)]

H. Visible emissions from each 4 MW reciprocating gas engine shall each not exceed 10% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 115, BACT]

(19) MLMF shall meet the requirements of 40 CFR Part 63 Subpart ZZZZ for the 4 MW gas engines by complying with 40 CFR Part 60 Subpart JJJJ and shall meet the requirements of 40 CFR Part 63 Subpart ZZZZ for the 1 MW diesel generator by complying with 40 CFR Part 60 Subpart IIII.

(20) **General Process Sources**

MLMF shall limit HAP emissions from the facility to less than 10 tons per year for a single HAP and 25 tons per year of all HAPs combined.

Visible emissions from any general process source shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.
[06-096 CMR 101]

(21) **Startup, Shutdown, Malfunction & Emergency Venting Recordkeeping**

MLMF shall record each startup, shutdown, and malfunction event including start time, end time, duration, cause, and method utilized to minimize the duration of the event and/or to prevent a reoccurrence. MLMF shall also track the time and duration of all emergency venting activities. [06-096 CMR115]

(22) **Annual Emission Statement**

In accordance with Emission Statements, 06-096 CMR 137 (as amended), MLMF 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 06-096 CMR 137.

The emission statement must be submitted as specified by the date in 06-096 CMR 137.

(23) MLMF shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 4th DAY OF January, 2011.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: James P. Brooks for
BETH NAGUSKY, ACTING 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 8, 2010
Date of application acceptance: April 22, 2010

Date filed with the Board of Environmental Protection: _____

This Order prepared by Edwin Cousins, Bureau of Air Quality

FILED
JAN - 5 2011
BOARD OF ENVIRONMENTAL PROT.
STATE OF MAINE