

**The Lane Construction Corporation  
Penobscot County  
Medway, Maine  
A-352-71-J-M**

**Departmental  
Findings of Fact and Order  
Air Emission License  
Amendment #1**

After review of the air emission license amendment 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

The Lane Construction Corporation (Lane) located in Medway, Maine, was issued Air Emission License A-352-71-I-R on November 3, 2003, permitting the operation of their crushed stone and gravel facility.

Lane has requested a minor revision to replace the existing Generator #1, which has a heat input of 7.8 MMBtu/hr, with a unit having a maximum heat input of 7.5 MMBtu/hr.

### B. Revised Emission Equipment

#### **Diesel Unit:**

<u>Source ID</u>	<u>Max. Capacity</u>	<u>Max. Firing Rate</u>	<u>Power Delivered</u>
Generator #1	7.5 MMBtu/hr	56 gal/hr	1070 HP

### C. Application Classification

This amendment will not increase emissions of any pollutant. Therefore, this modification is determined to be a minor revision and has been processed as such.

## **II. BEST PRACTICAL TREATMENT**

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 Bureau of Air Quality regulations.

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 Department's regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

### A. Generator #1

Generator #1 was manufactured in 1982 with a maximum heat input of 7.5 MMBtu/hr firing diesel fuel. This unit is used for power generation primarily at the licensed location but is sometimes, but not always, co-located with other

portable crushers or asphalt plants. Therefore, the maximum sulfur limit for the diesel fuel is 0.5% due to the fact that it is not always feasible to provide fuel for this unit separate from other off-road equipment on the site.

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

1. SO<sub>2</sub> emission data was based on fuel sulfur mass balance.
2. PM and PM<sub>10</sub> emission rates were based upon the requirements of MEDEP Chapter 103.
3. NO<sub>x</sub>, CO and VOC emission rates were based upon AP-42 data dated 10/96 for diesel engines greater than 600 hp.
4. Opacity from the diesel engine shall not exceed 30% on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.

**B. Revised Facility Emissions**

Based on the total use of 75,000 gallons per calendar year of diesel fuel with a sulfur content not to exceed 0.5% by weight for the generator, the total annual emissions for the facility are as follows:

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

<b>Pollutant</b>	<b>Tons/year</b>
PM	0.6
PM <sub>10</sub>	0.6
SO <sub>2</sub>	2.6
NO <sub>x</sub>	16.6
CO	4.4
VOC	0.5

**III. AMBIENT AIR QUALITY ANALYSIS**

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by-case basis. Based on the information available in the file, Lane Construction is below the emissions level required for modeling and monitoring.

**ORDER**

The Department hereby grants Air Emission License Minor Revision A-352-71-J-M, subject to the conditions found in Air Emission License A-352-71-I-R, and in addition 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.

(17) **Generator #1**

A. Fuel use in Generator #1 shall not exceed 75,000 gallons per calendar year of diesel fuel with a sulfur content not to exceed 0.5% by weight. Fuel use records and receipts (showing the quantity and percent sulfur of the fuel) for the diesel engines shall be maintained to demonstrate compliance.

[MEDEP Chapter 115, BACT]

B. Emissions from Generator #1 shall be limited to the following [MEDEP Chapter 115, BACT]:

<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>lb/hr</u>
PM	0.12	0.90
PM <sub>10</sub>	n/a	0.90
SO <sub>2</sub>	n/a	3.83
NO <sub>x</sub>	n/a	24.00
CO	n/a	6.38
VOC	n/a	0.75

C. Visible emissions from Generator #1 shall not exceed 30% on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.

[MEDEP Chapter 101]

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

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_

DAVID P. LITTELL, COMMISSIONER

**The term of this amendment shall be concurrent with the term of Air Emission License A-352-71-I-R.**

Date of initial receipt of application: May 4, 2007

Date of application acceptance: May 7, 2007

Date filed with the Board of Environmental Protection \_\_\_\_\_

This order prepared by Mark E. Roberts, Bureau of Air Quality