



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

**The Lane Construction Corporation
Penobscot County
Hermon, Maine
A-257-71-O-A (SM)**

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

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

I. REGISTRATION

A. Introduction

1. The Lane Construction Corporation (Lane) was issued Air Emission License A-257-71-N-R on June 18, 2010, permitting the operation of emission sources associated with their rock crushers and asphalt plant.
2. Lane has requested an amendment to their license to add natural gas as a fuel for the #26 batch mix asphalt plant and the HYCGO-200 hot oil heater.
3. The equipment addressed in this license is located at 1067 Odlin Road, Hermon, ME

B. Emission Equipment

The following equipment is addressed in this air emission license:

Asphalt Plant

<u>Equipment</u>	<u>Process Rate (TPH)</u>	<u>Design Capacity Firing Rate</u>	<u>Control Devices</u>	<u>Date of Manufacture</u>
Batch mix asphalt plant (#26)	420	150 MMBtu/hr #2 fuel oil, 0.5% S, spec. waste oil, 0.7% S; natural gas, neg. S	Baghouse	Plant Pre-1973 Burner 1998

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD, SUITE 6
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04679-2094
(207) 764-0477 FAX: (207) 760-3143

Heating Equipment

<u>Equipment</u>	<u>Maximum Capacity</u>	<u>Fuel Type</u>	<u>Maximum Firing Rate</u>
HYCGO-200 (Oil Heater)	2.1 MMBtu/hr	#2, 0.5% S, spec. waste oil, 0.7% S natural gas, neg. S	15 gal/hr

C. Application Classification

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the “Significant Emission Levels” as defined in the Department’s regulations. The emission increases are determined by subtracting the current licensed emissions preceding the modification from the maximum future licensed allowed emissions, as follows:

<u>Pollutant</u>	<u>Current License (TPY)</u>	<u>Future License (TPY)</u>	<u>Net Change (TPY)</u>	<u>Sig. Level (TPY)</u>
PM	6.17	8.22	2.05	100
PM ₁₀	6.17	8.22	2.05	100
SO ₂	47.06	48.60	1.54	100
NO _x	31.86	37.45	5.59	100
CO	59.11	77.73	18.62	100
VOC	6.23	7.90	1.67	50

This modification is determined to be a minor modification and has been processed as such.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

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

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Asphalt Plant

The batch mix asphalt plant currently fires ASTM D396 compliant #2 fuel oil with a sulfur content not to exceed 0.5% and specification waste oil, with a sulfur content not to exceed 0.7%. Lane has requested an amendment to fire natural gas in addition to #2 fuel oil and specification waste oil.

Total fuel use in the asphalt plant and the hot oil heater shall not exceed 133,000 MMBtu per year (equivalent to 950,000 gallons of #2 fuel oil), of #2 fuel oil, specification waste oil and natural gas combined, based on a 12-month rolling total.

BPT for the batch mix asphalt plant firing **natural gas** shall be:

PM/PM ₁₀	– based on 0.03gr/dscf
SO ₂	– 0.0034 lb/ton product; AP-42, Table 11.1-5 (dated 3/04)
NO _x	– 0.025 lb/ton product; AP-42, Table 11.1-5 (dated 3/04)
CO	– 0.4 lb/ton product; AP-42, Table 11.1-5 (dated 3/04)
VOC	– 0.0082 lb/ton product; AP-42, Table 11.1-6 (dated 3/04)
Opacity	– Visible emissions from the baghouse shall not exceed 20% opacity on a 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 101]

C. HYCGO-200 Heater

The HYCGO-200 Heater (hot oil heater) draws fuel from the same source as the asphalt plant currently ASTM D396 compliant #2 fuel oil with a maximum sulfur content of 0.5% and specification waste oil with a maximum sulfur content of 0.7%, by weight. Lane has requested an amendment to fire natural gas in addition to #2 fuel oil and specification waste oil.

Total fuel use in the asphalt plant and the hot oil heater shall not exceed 133,000 MMBtu per year (equivalent to 950,000 gallons of #2 fuel oil), of #2 fuel oil, specification waste oil and natural gas combined, based on a 12-month rolling total.

BPT for the heater firing **natural gas** shall be:

PM/PM ₁₀	– 0.12 lb/MMBtu; 06-096 CMR 103
SO ₂	– 0.6 lb/10 ⁶ scf; AP-42, Table 1.4-2 (dated 7/98)
NO _x	– 100 lb/10 ⁶ scf; AP-42, Table 1.4-1(dated 7/98)
CO	– 84 lb/10 ⁶ scf; AP-42, Table 1.4-1(dated 7/98)
VOC	– 5.5 lb/10 ⁶ scf; AP-42, Table 1.4-2 (dated 7/98)
Opacity	– Visible emissions from the baghouse shall not exceed 20% opacity on a 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 101]

D. Facility Emissions

Lane shall be restricted to the following annual emissions, based on a 12-month rolling total, and total fuel consumption of 133,000 MMBtu (the equivalent of 950,000 gallons of #2 fuel oil) of ASTM D396 compliant #2 fuel oil, specification waste oil and natural gas, combined, in the asphalt plant and hot oil heater, and 50,000 gallons of diesel fuel in the generator:

**Total Licensed Annual Emissions for the Facility
Tons per year
(Used to calculate the annual license fee)**

	PM	PM₁₀	SO₂	NO_x	CO	VOC
CAT D343 Generator	0.41	0.41	0.18	15.10	3.25	1.20
#26 Asphalt Plant and HYCGO 200 Heater	7.81	7.81	48.43	22.34	74.48	6.70
Total TPY	8.2	8.2	48.6	37.5	77.7	7.9

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Modeling is not required for a renewal if the total emissions of any pollutant released do not exceed the following and there are no extenuating circumstances:

<u>Pollutant</u>	<u>Tons/Year</u>
PM	25
PM ₁₀	25
SO ₂	50
NO _x	100
CO	250

Based on the total facility licensed emissions, Lane is below the emissions level required for modeling.

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-257-71-O-A subject to the conditions found in Air Emission License A-257-71-N-R, and in 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.

The following shall replace Specific Conditions (16)D and (16)G, in A-257-71-N-R:

(16) **Batch Mix Asphalt Plant #26**

- D. Opacity from the baghouse is limited to no greater than 20% on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

G. Lane shall be limited to the use of 133,000 MMBtu (equivalent to 950,000 gallons of #2 fuel oil) per year, on a 12-month rolling total basis, of ASTM compliant #2 fuel oil with a sulfur content not to exceed 0.5%, specification waste oil, with a sulfur content not to exceed 0.7%, and natural gas in the batch mix asphalt plant #26 and the HYCGO 200 Heater, combined. Emissions from the baghouse shall not exceed the following [06-096 CMR 115, BPT]:

Pollutant	grs/dscf	lb/hr
PM	0.03	17.62
PM ₁₀	-	17.62
SO ₂	-	109.23
NO _x	-	50.40
CO	-	168.00
VOC	-	15.12

DONE AND DATED IN AUGUSTA, MAINE THIS 8th DAY OF November, 2011.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Melanie Aho
PATRICIA W. AHO, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-257-71-N-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 07/11/2011

Date of application acceptance: 07/11/2011

Date filed with the Board of Environmental Protection:

This Order prepared by N. Lynn Cornfield, Bureau of Air Quality.

