



DEPARTMENT ORDER

**The Lane Construction Corporation  
 Hancock County  
 Hancock, Maine  
 A-49-71-P-A (SM)**

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

**FINDINGS OF FACT**

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 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (the Department) finds the following facts:

**I. REGISTRATION**

**A. Introduction**

The Lane Construction Corporation (Lane) was issued Air Emission License A-49-71-O-R/M on April 20, 2016, for the operation of emission sources associated with their hot mix asphalt plant located at 32 Washington Junction Road, Hancock, Maine.

Lane has requested an amendment to their license in order to replace the #28 Hot Mix Asphalt Batch Plant burner.

The main office is located at 953 Odlin Road, Bangor, Maine.

**B. Emission Equipment**

The following equipment is addressed in this Air Emission License Amendment:

**Asphalt Plant**

<b><u>Equipment</u></b>	<b><u>Process Rate (tons/hour)</u></b>	<b><u>Max. Capacity (MMBtu/hr)</u></b>	<b><u>Fuel Type, % sulfur</u></b>	<b><u>Firing Rate</u></b>	<b><u>Control Device</u></b>	<b><u>Date of Manuf.</u></b>
#28 Hot Mix Asphalt Batch Plant	240	82	Distillate Fuel, 0.5% Spec. Waste Oil, 0.7%	585.7 gal/hr	Baghouse	<b>Plant:</b> Pre-1973 <b>Burner:</b> 2017
		80	Propane, negl.	884.0 gal/hr		
		89	Natural Gas, negl.	86,407.8 gal/hr		

C. Definitions

*Modification.* For the purposes of this license and in accordance with 40 C.F.R. § 60.2, *modification* means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.

D. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

This application includes the licensing of new or modified equipment. The burner on the #28 Hot Mix Asphalt Batch Plant will be replaced, but it is not expected to cause an emissions increase because the exhaust flow rate, stack exit temperature, maximum hourly HMA throughput, and licensed annual HMA throughput will all remain the same. Therefore, this amendment is considered to be a minor modification and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

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 *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental, and energy impacts.

B. Asphalt Plant Burner Replacement

Lane operates an asphalt batch plant (#28 Hot Mix Asphalt Batch Plant) with a maximum hourly throughput of 240 ton/hr of asphalt and a 96.0 MMBtu/hr burner. Lane has requested an amendment to their license in order to replace the current 96.0 MMBtu/hr burner with a new burner that will be manufactured and installed later this year. The new burner will have a maximum heat input capacity of 82 MMBtu/hr for distillate fuel and specification waste oil, 80 MMBtu/hr for

propane, and 89 MMBtu/hr for natural gas. The Department has determined that the use of the new burner and the following emission limits constitute BACT for the #28 Hot Mix Asphalt Batch Plant burner replacement.

1. BACT Findings

The BACT emission limits for the #28 Hot Mix Asphalt Batch Plant when firing distillate fuel and specification waste oil were based on the following:

- PM, PM<sub>10</sub> – 0.03 gr/dscf and the use of a baghouse
- SO<sub>2</sub> – 0.088 lb/ton based on AP-42, Table 11.1-5, dated 3/04
- NO<sub>x</sub> – 0.12 lb/ton based on AP-42, Table 11.1-5, dated 3/04
- CO – 0.40 lb/ton based on AP-42, Table 11.1-5, dated 3/04
- VOC – 0.036 lb/ton based on AP-42, Table 11.1-6, dated 3/04
- Visible Emissions – 06-096 C.M.R. ch. 115, BACT

The BACT emission limits for the #28 Hot Mix Asphalt Batch Plant when firing natural gas and propane were based on the following:

- PM, PM<sub>10</sub> – 0.03 gr/dscf and the use of a baghouse
- SO<sub>2</sub> – 0.0046 lb/ton based on AP-42, Table 11.1-5, dated 3/04
- NO<sub>x</sub> – 0.025 lb/ton based on AP-42, Table 11.1-5, dated 3/04
- CO – 0.40 lb/ton based on AP-42, Table 11.1-5, dated 3/04
- VOC – 0.0082 lb/ton based on AP-42, Table 11.1-6, dated 3/04
- Visible Emissions – 06-096 C.M.R. ch. 115, BACT

The BACT emission limits for the #28 Hot Mix Asphalt Batch Plant are the following:

<u>Unit</u>	<u>Fuel</u>	<u>PM (lb/hr)</u>	<u>PM<sub>10</sub> (lb/hr)</u>	<u>SO<sub>2</sub> (lb/hr)</u>	<u>NO<sub>x</sub> (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
#28 Hot Mix Asphalt Batch Plant	Distillate Fuel/Spec. Waste Oil	7.9	7.9	21.1	28.8	96.0	8.6
	Natural Gas/Propane	7.9	7.9	1.1	6.0	96.0	2.0

Visible emissions from the #28 Hot Mix Asphalt Batch Plant baghouse shall not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a continuous three-hour period, during which time visible emissions shall not exceed 60% opacity.

General process emissions from the #28 Hot Mix Asphalt Batch Plant shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six-minute block average basis.

2. New Source Performance Standards

The #28 Hot Mix Asphalt Batch Plant was not previously subject to Environmental Protection Agency's (EPA) New Source Performance Standards (NSPS) *Standards of Performance for Hot Mix Asphalt Facilities*, 40 Code of Federal Regulation (C.F.R.) Part 60, Subpart I for facilities constructed or modified after June 11, 1973. Although the plant is being modified by having its burner replaced, the change does not fit the definition of a modification as defined in 40 C.F.R. § 60.2 because it will not increase emissions into the atmosphere of any air pollutant to which a standard applies; therefore, the #28 Hot Mix Asphalt Batch Plant is not subject to 40 C.F.R. Part 60, Subpart I. However, the PM emission limit is more stringent than the limit required by 40 C.F.R. Part 60, Subpart I.

C. Annual Emissions

Lane shall be restricted to the following annual emissions, based on a calendar year total. The tons per year limits were calculated based on a maximum throughput of 300,000 tons of asphalt per year for #28 Hot Mix Asphalt Batch Plant and a maximum total heat input of 4,200 MMBtu/year for HYCO 200 Hot Oil Heater:

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

	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>VOC</b>
#28 Batch Plant	4.9	4.9	13.2	18.0	60.0	5.4
Hyco 200 Hot Oil Heater	0.1	0.1	1.1	0.3	0.1	0.1
<b>Total TPY</b>	<b>5.0</b>	<b>5.0</b>	<b>14.3</b>	<b>18.3</b>	<b>60.1</b>	<b>5.5</b>

III. **AMBIENT AIR QUALITY ANALYSIS**

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

<b>Pollutant</b>	<b>Tons/Year</b>
PM <sub>10</sub>	25
SO <sub>2</sub>	50
NO <sub>x</sub>	50
CO	250

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

### **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 Amendment A-49-71-P-A, subject to the conditions found in Air Emission License A-49-71-O-R/M and the following condition.

Severability. The invalidity or unenforceability of any provision of this License or part thereof 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.

**SPECIFIC CONDITIONS**

The following Condition shall replace Condition (16)(F.)-(16)(H.) of Air Emission License A-49-71-O-R/M (dated April 20, 2016):

**(16) #28 Hot Mix Asphalt Batch Plant**

F. Emissions from the #28 Hot Mix Asphalt Batch Plant baghouse shall not exceed the following [06-096 C.M.R. ch. 115, BACT]:

<b>Pollutant</b>	<b>grs/dscf</b>	<b>Firing Distillate/ Spec. Waste Oil (lb/hr)</b>	<b>Firing Natural Gas/Propane (lb/hr)</b>
PM	0.03	7.9	7.9
PM <sub>10</sub>	-	7.9	7.9
SO <sub>2</sub>	-	21.1	1.1
NO <sub>x</sub>	-	28.8	6.0
CO	-	96.0	96.0
VOC	-	8.6	2.0

G. Visible emissions from the #28 Hot Mix Asphalt Batch Plant baghouse is limited to no greater than 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a continuous three-hour period, during which time visible emissions shall not exceed 60% opacity. [06-096 C.M.R. ch. 115, BACT]

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H. General process emissions from the #28 Hot Mix Asphalt Batch Plant shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]

DONE AND DATED IN AUGUSTA, MAINE THIS 24 DAY OF May, 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Mark Allen Robert Cove for  
PAUL MERCER, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-49-71-O-R/M.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 3/13/17  
Date of application acceptance: 3/14/17

Date filed with the Board of Environmental Protection:

This Order prepared by Jonathan E. Rice, Bureau of Air Quality.

