



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

AVERY T. DAY
ACTING COMMISSIONER

**The Lane Construction Corporation
Penobscot County
Hermon, Maine
A-166-71-O-R/A (SM)**

**Departmental
Findings of Fact and Order
Air Emission License
Renewal and Amendment**

FINDINGS OF FACT

After review of the air emission license renewal and 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 Annotated (M.R.S.A.), §344 and §590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

The Lane Construction Corporation (Lane) has applied to renew their Air Emission License, permitting the operation of their portable hot mix asphalt (HMA) drum plant and associated equipment.

Lane has also requested an amendment to their license in order to remove one crusher, SEC 48S, and one generator, CAT 3046, to transfer Heater #2 to their A-860 license, and to rename the former PI Kolman generator Kolman Diesel 10937.

The Department has recently changed from limiting asphalt plants, including hot mix asphalt plants, by fuel use to limiting them by throughput to better estimate potential emissions; therefore the Department has imposed a throughput limit of 328,400 tons of HMA per year to replace the previously licensed facility-wide heat input limit of 133,000 MMBtu/year. A heat input limit of 4,200 MMBtu/year will also be added for the AC Heater and Terex Hot Oil Heater combined.

The equipment addressed in this license is based at Lane's Odlin Road facility in Hermon, Maine.

B. Emission Equipment

The following equipment is addressed in this Air Emission License:

Hot Mix Asphalt (HMA) Plant

<u>Equipment</u>	<u>Process Rate (tons/hour)</u>	<u>Design Capacity Fuel, % S</u>	<u>Control Devices</u>	<u>Stack ID</u>	<u>Date of Manuf.</u>
#32 Drum Mix Asphalt Plant	400	162 MMBtu/hr, distillate fuel, 0.5% S, spec waste oil, 0.7% S, propane, neg. S, natural gas, neg. S.	Baghouse	3	1979 Est.

Generators

<u>Unit ID</u>	<u>Max. Capacity (MMBtu/hr)</u>	<u>Firing Rate (gal/hr)</u>	<u>Fuel Type, % Sulfur</u>	<u>Date of Manuf.</u>
CAT 3412 Generator	3.9	28.5	distillate fuel, 0.0015%	1979 Est.
Kolman Diesel 10937*	0.17	1.25	distillate fuel, 0.0015%	Pre-1973
Night Generator*	0.085	0.6	distillate fuel, 0.0015%	1994

*Insignificant Activity – included for inventory completeness only.

Heating Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Fuel Type, % Sulfur</u>	<u>Max. Firing Rate</u>	<u>Date of Manuf.</u>
AC Heater	1.33	distillate fuel, 0.5%	9.5 gal/hr	1979 Est.
		propane, negl.	14.7 gal/hr	
		natural gas, negl.	1291 scf/hr	
HMX651CMI/ Terex Hot Oil Heater	2.1	distillate fuel, 0.5%	15 gal/hr	2005
		propane, negl.	23.2 gal/hr	
		natural gas, negl.	2038 scf/hr	

C. Definitions

Distillate Fuel means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396, diesel fuel oil numbers 1 or 2, as defined in ASTM D975, kerosene, as defined in ASTM D3699, biodiesel as defined in ASTM D6751, or biodiesel blends as defined in ASTM D7467.

Virgin oil means any petroleum derived oil, including petroleum fuels, unused motor oils, hydraulic fluids, lubrication oils and other industrial oils, that are not characterized as waste oil.

D. Application Classification

The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the "Significant Emission" levels as defined in the Department's *Definitions Regulation*, 06-096 CMR 100 (as amended). The emission increases are determined by subtracting the current licensed annual emissions preceding the modification from the maximum future licensed annual emissions, as follows:

<u>Pollutant</u>	<u>Current License (TPY)</u>	<u>Future License (TPY)</u>	<u>Net Change (TPY)</u>	<u>Significant Emission Levels</u>
PM	4.2	4.4	0.2	100
PM ₁₀	4.2	4.4	0.2	100
SO ₂	11.3	11.1	-0.2	100
NO _x	24.4	24.7	+0.3	100
CO	24.7	24.9	0.2	100
VOC	6.5	6.6	0.1	50
CO ₂ e	<100,000	<100,000	-	100,000

This amendment will not increase emissions of any pollutant above the significant emission levels, therefore this application is determined to be a renewal with a minor modification and has been processed as such. The Department has determined the facility is a minor source and the application has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (CMR) 115 (as amended). With the annual throughput limit on the #32 Drum Mix Asphalt Plant and the annual fuel limits on the AC Heater and Terex Hot Oil Heater, and the CAT 3412 generator, the facility is licensed below the major source thresholds for criteria pollutants and is considered a synthetic minor. With the annual throughput limit on the #32 Drum Mix Asphalt Plant and the annual fuel limits on the AC Heater and Terex Hot Oil Heater, and the CAT 3412 generator, the facility is licensed below the major source thresholds for hazardous air pollutants (HAP) and is considered an area source of HAP.

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 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment.

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. #32 Drum Mix Asphalt Plant

Lane operates the #32 Drum Mix Asphalt Plant with a maximum hourly throughput of 400 tons per hour of HMA and a 162 MMBtu per hour burner capable of firing distillate fuel with a maximum sulfur content of 0.5% by weight, specification waste oil with a maximum sulfur content of 0.7% by weight, propane or natural gas. In the past it has been assumed that there is a linear relationship between the fuel required for a HMA plant burner and the plant output. Meaning, it was assumed that to operate at 100% throughput requires the burner to fire at 100%, to operate at 75% throughput requires the burner to fire at 75%, etc. This assumption allowed for a HMA plant to have its annual emissions limited by placing a fuel limit on the burner.

However, in some cases it has been determined that the HMA plant is operated significantly more efficiently than originally anticipated. This allows the burner to operate at a lower firing rate than would be expected for the HMA output. Since emission factors for HMA plants are based on tons of HMA produced, without the previously mentioned linear relationship between plant output and burner firing rate, a fuel limit on the HMA plant is not sufficient to limit the equipment's annual emissions.

Therefore, to ensure annual emissions are limited to less than major source thresholds, HMA throughput is limited instead of fuel consumption. Accordingly, the annual throughput of the HMA drum plant shall not exceed 328,400 tons of HMA per year on a calendar year total basis.

1. BPT Findings

The BPT emission limits for the #32 Drum Mix Asphalt Plant when firing distillate fuel or specification waste oil were based on the following:

- PM/PM₁₀ – 0.03 gr/dscf and 9.16 lb/hr and the use of a baghouse, BPT. This is more stringent than the 40 CFR Part 60, Subpart I PM limit of 0.04 gr/dscf.
- SO₂ – 0.058 lb/ton product for distillate fuel and specification waste oil, based on AP-42, Table 11.1-7, dated 3/04
- NO_x – 0.055 lb/ton product based on AP-42, Table 11.1-7, dated 3/04
- CO – 0.13 lb/ton product based on AP-42, Table 11.1-7, dated 3/04
- VOC – 0.032 lb/ton product based on AP-42, Table 11.1-8, dated 3/04
- Opacity – 06-096 CMR 101

The BPT emission limits for the #32 Drum Mix Asphalt Plant when firing propane or natural gas were based on the following:

- PM/PM₁₀ – 0.03 gr/dscf and 9.16 lb/hr and the use of a baghouse, BPT. This is more stringent than the 40 CFR Part 60, Subpart I PM limit of 0.04 gr/dscf.
- SO₂ – 0.0034 lb/ton product based on AP-42, Table 11.1-7, dated 3/04
- NO_x – 0.026 lb/ton product based on AP-42, Table 11.1-7, dated 3/04
- CO – 0.13 lb/ton product based on AP-42, Table 11.1-7, dated 3/04
- VOC – 0.032 lb/ton product based on AP-42, Table 11.1-8, dated 3/04
- Opacity – 06-096 CMR 101

The BPT emission limits for the #32 Drum Mix Asphalt Plant are the following:

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM₁₀ (lb/hr)</u>	<u>SO₂ (lb/hr)</u>	<u>NO_x (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
#32 Drum Mix Asphalt Plant Distillate fuel/spec. waste oil	9.16	9.16	23.20	22.00	52.00	12.80
#32 Drum Mix Asphalt Plant Natural gas/propane	9.16	9.16	1.36	10.40	52.00	12.80

Per 06-096 CMR 101, *Visible Emission Regulation*: visible emissions from the asphalt plant baghouse shall not exceed 20% opacity on a six (6)-minute block average basis, except for no more than two (2), six (6)-minute block averages in a continuous three (3)-hour period. This is consistent with the 40 CFR Part 60, Subpart I PM limit of 20% opacity.

General process emissions from the asphalt plant shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six (6)-minute block

average basis except for no more than one (1), six (6)-minute block average in a one (1)-hour period.

The #32 Drum Mix Asphalt Plant is licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 38 M.R.S.A. §603-A(2)(A)(3), as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm). Therefore, beginning July 1, 2018, the distillate fuel purchased or otherwise obtained for use in the #32 Drum Mix Asphalt Plant shall not exceed a sulfur content of 0.0015% by weight (15 ppm).

2. New Source Performance Standards

The #32 Drum Mix Asphalt Plant was manufactured in 1979 (estimated) and is therefore subject to the federal Environmental Protection Agency's (EPA) New Source Performance Standards (NSPS) 40 Code of Federal Regulation (CFR) Part 60, Subpart I *Standards of Performance for Hot Mix Asphalt Facilities* constructed or modified after June 11, 1973.

3. Control Equipment

The #32 Drum Mix Asphalt Plant shall be controlled by a baghouse.

4. Periodic Monitoring

The performance of the baghouse shall be constantly monitored by either one of the following at all times the #32 Drum Mix Asphalt Plant is operating:

- a. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, Lane shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
- b. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the HMA plant is operating with insufficient control and corrective action shall be taken immediately.

Lane shall keep records of baghouse failures and baghouse maintenance.

Lane shall keep records of fuel use and tons of HMA produced for the #32 Drum Mix Asphalt Plant which shall be maintained for at least six years and made available to the Department upon request. Records shall also be maintained recording the quantity and analyzed test results of all specification waste oil fired in the dryer.

Per 40 CFR Part 60, Subpart I, Lane was required to conduct a performance test for PM within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial

startup of such facility. The initial performance test on the #32 Drum Mix Asphalt Plant was successfully completed on October 2, 1979.

5. Contaminated Soils

Lane may process up to 10,000 cubic yards per year of soil contaminated by virgin oil as defined by the Bureau of Air Quality without prior approval from the Department. Processing of virgin oil contaminated soils may require a solid waste processing facility license under Maine Solid Waste Management Rules, 06-096 CMR 409 (as amended). The material shall be handled in accordance with the requirement of the Bureau of Remediation and Waste Management.

Lane shall not process soils which are classified as hazardous waste or which have unknown contaminants.

When processing contaminated soils, Lane shall maintain records which specify the quantity and type of contaminant in the soil as well as the origin and characterization of the contaminated soil. In addition, when processing contaminated soil, Lane shall maintain records of processing temperature, asphalt feed rates and dryer throughput on an hourly basis. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management.

C. Cat 3412 Generator

The CAT 3412 Generator is a portable engine with a maximum design heat input capacity of 3.9 MMBtu/hr. The CAT 3412 Generator fires distillate fuel with a maximum sulfur content of 0.0015% by weight at a maximum rate of 28.5 gallons per hour, and is used to power the #32 Drum Mix Asphalt Plant. The CAT 3412 Generator was manufactured in 1979 (estimated). The CAT 3412 Generator shall be limited to 50,000 gallons per year of distillate fuel on a calendar year basis.

1. BPT Findings

The BPT emission limits for the CAT 3412 Generator were based on the following:

PM/PM ₁₀	- 0.12 lb/MMBtu from 06-096 CMR 103
SO ₂	- combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
NO _x	- 4.41 lb/MMBtu from AP-42 dated 10/96
CO	- 0.95 lb/MMBtu from AP-42 dated 10/96
VOC	- 0.35 lb/MMBtu from AP-42 dated 10/96
Opacity	- 06-096 CMR 115, BPT

The BPT emission limits for the CAT 3412 Generator are the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>
CAT 3412 Generator	PM	0.12

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM₁₀ (lb/hr)</u>	<u>SO₂ (lb/hr)</u>	<u>NO_x (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
CAT 3412 Generator	0.47	0.47	0.01	17.20	3.71	1.37

Visible emissions from the CAT 3412 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 three (3)-hour period.
(06-096 CMR 115, BPT)

2. New Source Performance Standards

The CAT 3412 Generator is considered a non-road engine, as opposed to a stationary engine, since the generator is portable and will be moved to various sites with the asphalt plant. Therefore, the CAT 3412 Generator is not subject to New Source Performance Standards 40 CFR Part 60, Subpart III, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*.

3. National Emission Standards for Hazardous Air Pollutants

The CAT 3412 Generator is considered a non-road engine, as opposed to a stationary engine, since the generator is portable and will be moved to various sites with the asphalt plant. Therefore, the CAT 3412 Generator is not subject to 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*.

The definition in 40 CFR Part 1068.30 states that a non-road engine is an internal combustion engine that meets certain criteria, including: "Portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform." 40 CFR Part 1068.30 further states that an engine is not a non-road engine if it remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. An engine located at a seasonal source (a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year) is an engine that

remains at a seasonal source during the full annual operating period of the seasonal source.

D. AC Heater

The AC Heater has a maximum design heat input capacity of 1.33 MMBtu/hr and is capable of firing distillate fuel with a maximum sulfur content of 0.5% by weight, propane, or natural gas. The AC Heater was manufactured in 1979 (estimated). Fuel use for the AC Heater and Terex Hot Oil Heater combined shall not exceed an annual heat input of 4,200 MMBtu (approximately 30,000 gal/yr of distillate fuel).

1. BPT Findings

The BPT emission limits for the AC Heater when firing distillate fuel were based on the following:

- PM/PM₁₀ – 0.08 lb/MMBtu based on 06-096 CMR 103
- SO₂ – 0.5 lb/MMBtu based on firing distillate fuel with a sulfur content not to exceed 0.5%.
- NO_x – 20 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
- CO – 5 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
- VOC – 0.34 lb/1000 gal based on AP-42, Table 1.3-3, dated 5/10
- Opacity – 06-096 CMR 101

The BPT emission limits for the AC Heater when firing propane or natural gas were based on the following:

- PM/PM₁₀ – 0.05 lb/MMBtu based on 06-096 CMR 103
- SO₂ – 0.6 lb/MMscf based in AP-42, Table 1.4-2
- NO_x – 100 lb/MMscf based on AP-42, Table 1.4-1, dated 07/98
- CO – 84 lb/MMscf based on AP-42, Table 1.4-1, dated 07/98
- VOC – 5.5 lb/MMscf based on AP-42, Table 1.4-2, dated 07/98
- Opacity – 06-096 CMR 101

The BPT emission limits for the AC Heater are the following:

Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
AC Heater Distillate fuel	0.11	0.11	0.67	0.19	0.05	0.01
AC Heater Natural gas/propane	0.07	0.07	0.01	0.13	0.11	0.01

Visible emissions from the AC Heater when firing distillate fuel shall not exceed 20% opacity on a six (6)-minute block average, except for no more than one (1), six (6)-minute block average in a three (3)-hour period.

Visible emissions from the AC Heater when firing propane or natural gas shall not exceed 10% opacity on a six (6)-minute block average, except for no more than one (1), six (6)-minute block average in a three (3)-hour period.

The AC Heater is licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 38 M.R.S.A. §603-A(2)(A)(3), as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm). Therefore, beginning July 1, 2018, the distillate fuel purchased or otherwise obtained for use in the AC Heater shall not exceed a sulfur content of 0.0015% by weight (15 ppm).

2. Periodic Monitoring

Lane shall keep records of fuel use and receipts for the AC Heater which shall be converted to MMBtu monthly and as a calendar year total. The records shall be maintained for at least six years and made available to the Department upon request. Records shall also be maintained recording the quantity and analyzed test results of all specification waste oil fired in the AC Heater.

3. New Source Performance Standards

The AC Heater does not heat water. It does not meet the definition of a “steam generating unit” and therefore is not subject to 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.

4. National Emission Standards for Hazardous Air Pollutants

The AC Heater does not heat water. It does not meet the definition of a “boiler” and therefore is not subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ).

E. HMX651 CMI/Terex Hot Oil Heater

The HMX651 CMI/Terex Hot Oil Heater has a maximum design heat input capacity of 2.1 MMBtu/hr and is capable of firing distillate fuel with a maximum sulfur content of 0.5% by weight, natural gas, or propane. The Terex Hot Oil Heater is used to heat oil for heat transfer purposes relating to the storage of

HMA. Fuel use for the AC Heater and Terex Hot Oil Heater combined shall not exceed an annual heat input of 4,200 MMBtu (approximately 30,000 gal/yr of distillate fuel).

1. BPT Findings

The BPT emission limits for the Terex Hot Oil Heater when firing distillate fuel or specification waste oil were based on the following:

- PM/PM₁₀ – 0.08 lb/MMBtu based on 06-096 CMR 103
- SO₂ – 0.5 lb/MMBtu based on firing distillate fuel with a maximum sulfur content of 0.5% by weight
- NO_x – 20 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
- CO – 5 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
- VOC – 0.34 lb/1000 gal based on AP-42, Table 1.3-3, dated 5/10
- Opacity – 06-096 CMR 101

The BPT emission limits for the Terex Hot Oil Heater when firing propane or natural gas were based on the following:

- PM/PM₁₀ – 0.05 lb/MMBtu based on 06-096 CMR 103
- SO₂ – 0.6 lb/MMscf based in AP-42, Table 1.4-2
- NO_x – 100 lb/MMscf based on AP-42, Table 1.4-1, dated 07/98
- CO – 84 lb/MMscf based on AP-42, Table 1.4-1, dated 07/98
- VOC – 5.5 lb/MMscf based on AP-42, Table 1.4-2, dated 07/98
- Opacity – 06-096 CMR 101

The BPT emission limits for the Terex Hot Oil Heater are the following:

Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Terex Hot Oil Heater Distillate fuel	0.17	0.17	1.05	0.30	0.08	0.01
Terex Hot Oil Heater Natural gas/propane	0.11	0.11	0.01	0.20	0.17	0.01

Visible emissions from the Terex Hot Oil Heater when firing distillate fuel shall not exceed 20% opacity on a six (6)-minute block average, except for no more than one (1), six (6)-minute block average in a three (3) hour period.

Visible emissions from the Terex Hot Oil Heater when firing propane or natural gas shall not exceed 10% opacity on a six (6)-minute block average, except for no more than one (1), six (6)-minute block average in a three (3) hour period.

The Terex Hot Oil Heater is licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 38 M.R.S.A. §603-A(2)(A)(3), as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm). Therefore, beginning July 1, 2018, the distillate fuel purchased or otherwise obtained for use in the Terex Hot Oil Heater shall not exceed a sulfur content of 0.0015% by weight (15 ppm).

2. Periodic Monitoring

Lane shall keep records of fuel use and receipts for the Terex Hot Oil Heater which shall be converted to MMBtu monthly and as a calendar year total. The records shall be maintained for at least six years and made available to the Department upon request. Records shall also be maintained recording the quantity and analyzed test results of all specification waste oil fired in the Terex Hot Oil Heater.

3. New Source Performance Standards

The Terex Hot Oil Heater does not heat water. It does not meet the definition of a “steam generating unit” and therefore is not subject to 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.

4. National Emission Standards for Hazardous Air Pollutants

The Terex Hot Oil Heater does not heat water. It does not meet the definition of a “boiler” and therefore is not subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ).

F. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five (5) minutes in any one (1)-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour.

G. General Process Emissions

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

H. Annual Emissions

1. Total Annual Emissions

Lane shall be restricted to the following annual emissions, based on a calendar year. The tons per year limits were calculated based on 328,400 tons/yr of asphalt for the #32 Drum Mix Asphalt Plant, 4,200 MMBtu/yr for the AC Heater and the Terex Hot Oil Heater combined, and 50,000 gal/yr of distillate fuel for the generators:

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

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
#32 Drum Mix Asphalt Plant	3.8	3.8	9.5	9.0	21.4	5.3
CAT 3412 Generator	0.4	0.4	0.1	15.4	3.3	1.2
AC Heater and Terex Hot Oil Heater	0.2	0.2	1.1	0.3	0.2	0.1
Total TPY	4.4	4.4	10.7	24.7	24.9	6.6

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans*, 40 CFR Part 52, Subpart A, §52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO₂e).

The quantity of CO₂e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's fuel use, heat input, and throughput limits;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and 40 CFR Part 98, *Mandatory Greenhouse Gas Reporting*; and
- global warming potentials contained in 40 CFR Part 98.

No additional licensing actions to address GHG emissions are required at this time.

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source shall be determined by the Department on a case-by case basis. In accordance with 06-096 CMR 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:

<u>Pollutant</u>	<u>Tons/Year</u>
PM ₁₀	25
SO ₂	50
NO _x	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 A-166-71-O-R/A, 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-A. [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 emissions 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) **Drum Mix Asphalt Plant #32**

A. Fuel Use

1. The #32 Drum Mix Asphalt Plant is licensed to fire distillate fuel with a maximum sulfur content of 0.5% by weight, specification waste oil with a maximum sulfur content of 0.7% by weight, propane, and natural gas. [06-096 CMR 115, BPT]
2. Prior to July 1, 2018, Lane shall fire distillate fuel with a maximum sulfur content not to exceed 0.5% by weight in the #32 Drum Mix Asphalt Plant [06-096 CMR 115, BPT]
3. Beginning July 1, 2018, Lane shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm) for use in the #32 Drum Mix Asphalt Plant. [06-096 CMR 115, BPT]
4. Compliance shall be demonstrated by fuel records from the supplier showing the type and percent sulfur of the fuel delivered (if applicable). [06-096 CMR 115, BPT]
5. A log shall be maintained recording the quantity and analyzed test results of all specification waste oil fired in the #32 Drum Mix Asphalt Plant. [06-096 CMR 115, BPT and 06-096 CMR 860]

- B. The production rate of the #32 Asphalt Batch Plant shall not exceed 328,400 tons of asphalt per year. Production records shall indicate how many tons of

asphalt were produced while firing each fuel and shall be kept on a monthly and calendar year total basis. [06-096 CMR 115, BPT]

- C. Emissions from the #32 Drum Mix Asphalt Plant shall vent to a baghouse, and all components of the asphalt plant shall be maintained so as to prevent PM leaks. [06-096 CMR 115, BPT]
- D. The performance of the baghouse shall be constantly monitored by either one of the following at all times the #32 Drum Mix Asphalt Plant is operating [06-096 CMR 115, BPT]:
1. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, Lane shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
 2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the HMA plant is operating with insufficient control and corrective action shall be taken immediately.
- E. To document maintenance of the baghouse, Lane shall keep maintenance records recording the date and location of all bag failures as well as all routine maintenance. The maintenance records shall be kept on-site at the HMA plant location. [06-096 CMR 115, BPT]
- F. Emissions from the asphalt plant baghouse shall not exceed the following [06-096 CMR 115, BPT]:

Pollutant	grs/dscf	lb/hr	
		distillate fuel, spec. waste oil	propane, natural gas
PM	0.03	9.16	9.16
PM ₁₀	-	9.16	9.16
SO ₂	-	23.20	1.36
NO _x	-	22.00	10.40
CO	-	52.00	52.00
VOC	-	12.80	12.80

- G. 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 three (3)-hour period. [06-096 CMR 101]
- H. General process emissions from the #32 Drum Mix Asphalt Plant shall be controlled so as to prevent visible emissions in excess of 20% opacity on a

six (6)-minute block average basis except for no more than one (1), six (6)-minute block average in a one (1)-hour period. [06-096 CMR 101]

- I. The #32 Drum Mix Asphalt Plant is subject to 40 CFR Part 60 Subparts A and I, and Lane shall comply with all applicable requirements, including the notification and recordkeeping requirements of 40 CFR Part 60.7 and the initial performance test requirements of 40 CFR Part 60.8. The initial performance test for the #32 Drum Mix Asphalt Plant was successfully completed on October 2, 1979.
- J. Lane may process up to 10,000 cubic yards per year of soil contaminated with virgin oil as defined by the Bureau of Air Quality without prior approval from the Bureau of Air Quality. Processing of virgin oil contaminated soils may require a solid waste processing facility license under MEDEP Chapter 409. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management. [06-096 CMR 115, BPT]
- K. Lane shall not process soils which are classified as hazardous waste or which have unknown contaminants. [06-096 CMR 115, BPT]
- L. When processing contaminated soils, Lane shall maintain records which specify the quantity and type of contaminant in the soil as well as the origin and characterization of the contaminated soil. In addition, when processing contaminated soil, Lane shall maintain records of processing temperature, asphalt feed rates and dryer throughput on an hourly basis. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management. [06-096 CMR 115, BPT]

(17) CAT 3412 Generator

A. Fuel Use

- 1. The CAT 3412 Generator is licensed to fire distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight). [06-096 CMR 115, BACT]
- 2. Total fuel use for the CAT 3412 Generator shall not exceed 50,000 gallons per year of distillate fuel. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and sulfur content of the fuel delivered. Records of annual fuel use shall be kept on a monthly and calendar year basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
CAT 3412 Generator	PM	0.12	06-096 CMR 103(2)(B)(1)(a)

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

Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
CAT 3412 Generator	0.47	0.47	0.01	17.20	3.71	1.37

D. Visible emissions from the CAT 3412 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 three (3)-hour period. [06-096 CMR 101]

(18) **AC Heater**

A. Fuel Use

1. The AC Heater is licensed to fire distillate fuel with a maximum sulfur content of 0.5% by weight, propane, or natural gas. [06-096 CMR 115, BPT]
2. The AC Heater and Terex Hot Oil Heater shall be limited to 4,200 MMBtu of heat input on a calendar year total basis (approximately 30,000 gal/yr of distillate fuel). Fuel use shall be converted to MMBtu on a monthly and calendar year basis. [06-096 CMR 115, BPT]
3. Prior to July 1, 2018, Lane shall fire distillate fuel with a maximum sulfur content not to exceed 0.5% by weight in the AC Heater. [06-096 CMR 115, BPT]
4. Beginning July 1, 2018, Lane shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm) for use in the AC Heater. [06-096 CMR 115, BPT]
5. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur of the fuel delivered (if applicable). Records of annual fuel use shall be kept on a monthly and calendar year basis. [06-096 CMR 115, BPT]

B. Emissions from the AC Heater shall not exceed the following [06-096 CMR 115, BPT]:

Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
AC Heater Distillate fuel	0.11	0.11	0.67	0.19	0.05	0.01
AC Heater Natural gas/propane	0.07	0.07	0.01	0.13	0.11	0.01

C. Visible Emissions

1. Visible emissions from the AC Heater when firing distillate fuel shall not exceed 20% opacity on a six (6)-minute block average, except for no more than one (1), six (6)-minute block average in a continuous three (3)-hour period. [06-096 CMR 101]
2. Visible emissions from the AC Heater when firing natural gas or propane shall not exceed 10% opacity on a six (6)-minute block average, except for no more than one (1), six (6)-minute block average in a continuous three (3)-hour period. [06-096 CMR 101]

(19) **HMX651 CMI/Terex Hot Oil Heater**

A. Fuel Use

1. The Terex Hot Oil Heater is licensed to fire distillate fuel with a maximum sulfur content of 0.5% by weight, propane or natural gas. [06-096 CMR 115, BPT]
2. The Terex Hot Oil Heater shall be included in the AC Heater limit of 4,200 MMBtu of heat input on a calendar year total basis (approximately 30,000 gal/yr of distillate fuel). Fuel use shall be converted to MMBtu on a monthly and calendar year basis. [06-096 CMR 115, BPT]
3. Prior to July 1, 2018, Lane shall fire distillate fuel with a maximum sulfur content not to exceed 0.5% by weight in the Terex Hot Oil Heater. [06-096 CMR 115, BPT]
4. Beginning July 1, 2018, Lane shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm) for use in the Terex Hot Oil Heater. [06-096 CMR 115, BPT]
5. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur of the fuel delivered (if applicable). Records of annual fuel use shall be kept on a monthly and calendar year basis. [06-096 CMR 115, BPT]

B. Emissions from the Terex Hot Oil Heater shall not exceed the following [06-096 CMR 115, BPT]:

Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Terex Hot Oil Heater Distillate fuel	0.17	0.17	1.05	0.30	0.08	0.01
Terex Hot Oil Heater Natural gas/propane	0.11	0.11	0.01	0.20	0.17	0.01

C. Visible Emissions

1. Visible emissions from the Terex Hot Oil Heater when firing distillate fuel shall not exceed 20% opacity on a six (6)-minute block average, except for no more than one (1), six (6)-minute block averages in a continuous three (3)-hour period. [06-096 CMR 101]
2. Visible emissions from the Terex Hot Oil Heater when firing natural gas or propane shall not exceed 10% opacity on a six (6)-minute block average, except for no more than one (1), six (6)-minute block averages in a continuous three (3)-hour period. [06-096 CMR 101]

(20) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five (5) minutes in any one (1)-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1)-hour. [06-096 CMR 101]

(21) **General Process Sources**

Visible emissions from any general process (including conveyor belts) shall not exceed 20% opacity on a six (6)-minute block average basis, except for no more than one (1), six (6)-minute block average in a one (1)-hour period. [06-096 CMR 101, 06-096 CMR 115, BPT]

(22) **Equipment Relocation** [06-096 CMR 115, BPT]

- A. Lane shall notify the Bureau of Air Quality, by a written notification, prior to relocation of any equipment carried on this license. It is preferred for notice of relocation to be submitted through the Department's on-line e-notice at:

www.maine.gov/dep/air/compliance/forms/relocation

Written notice may also be sent by fax (207-287-7641) or mail. Notification sent by mail shall be sent to the address below:

Attn: Relocation Notice
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

The notification shall include the address of the equipment's new location, an identification of the equipment and the license number pertaining to the relocated equipment.

- B. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification shall be made to the respective county commissioners.
- (23) Lane shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order. [06-096 CMR 115, BPT]
- (24) Lane 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 23 DAY OF December, 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *Marc Allen Robert Corne* for
AVERY T. DAY, ACTING COMMISSIONER

The term of this license shall be ten (10) years from the signature date above.

[Note: If a complete renewal application, as determined by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 MRSA §10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the renewal of the license.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 02/23/2015

Date of application acceptance: 02/23/2015

Date filed with the Board of Environmental Protection:

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

