

# STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

#### **DEPARTMENT ORDER**

The Lane Construction Corporation Waldo County Belfast, Maine A-54-71-M-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 amendment and renewal 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 (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 emissions sources associated with their stationary hot mix asphalt (HMA) batch plant and portable crushed stone and gravel facility.

Lane has also requested an amendment to their license in order to add Diesel TEL48STD and rock crusher SECTEL48STD to this license from their surrendered A-804-71-F-R license, to remove rock crushers PRI 2540, PRI 3042, SEC 425A, and SEC 425B from this license, to remove Diesels N14PA, N14PB, and Diesel PJ from this license, to change the fuel limit for the remaining generators from 60,000 gal/yr to 40,000 gal/yr, and to include a fuel limit of 30,000 gal/yr of distillate fuel and specification waste oil combined for the HYCO 200 Hot Oil Heater and AC Heater combined.

The Department has recently changed from limiting asphalt plants, including HMA plants, by fuel use to limiting them by throughput to more accurately estimate potential emissions; therefore, the Department has imposed a throughput limit of 200,000 tons of HMA per year to replace the previously licensed fuel limit of 720,000 gallons/year for HMA Batch Plant #42, the HYCO 200 Hot Oil Heater, and the AC Heater combined.

The equipment addressed in this license is located at 190 Swan Lake Avenue, Belfast, Maine.

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

## B. Emission Equipment

The following equipment is addressed in this Air Emission License:

### Hot Mix Asphalt (HMA) Plant

2

<u>Equipment</u>	Process Rate (tons/hour)	Maximum Capacity (MMBtu/hr)	Fuel Type, % Sulfur	Firing <u>Rate</u>	Control <u>Devices</u>	Date of <u>Manuf.</u>
Hot Mix Asphalt (HMA) Batch Plant #42*	120	39	Distillate fuel, 0.5% Spec. waste oil, 0.7%	278 gal/hr	Baghouse	Pre-1973

<sup>\*</sup>Previously called Rotary Dryer in air emission license A-54-71-L-R/A

#### **Rock Crusher**

		<b>Process Rate</b>	Date of	
<b>Designation</b>	<u>Powered</u>	(tons/hour)	<u>Manufacture</u>	Control Device
SECTEL48STD*	Diesel TEL48STD	210	1972	Spray Nozzles

<sup>\*</sup>Previously included in license A-804-71-F-R

Rock crusher PRI 2540 was disposed of in 2013, rock crushers SEC 425A and SEC 425B were sold in 2013, and rock crusher PRI 3042 was sold in 2015. Rock crushers PRI 2540, SEC 425A, SEC 425B, and PRI 3042 are all hereby removed from this air emission license.

#### **Generator Units**

	Max.	Max. Firing		
	Capacity	Rate		Date of
<u>Unit ID</u>	(MMBtu/hr)	(gal/hr)	<u>Fuel Type, % Sulfur</u>	<u>Manuf.</u>
CAT 3412	3.8	28	distillate fuel, 0.0015% sulfur	1988
Diesel TEL48STD*	2.2	15.6	distillate fuel, 0.0015% sulfur	1972

<sup>\*</sup>Previously included in license A-804-71-F-R

Diesels N14PA and N14PB were both sold in 2013 and Diesel PJ was sold in 2016. Diesels N14PA, N14PB, and Diesel PJ are hereby removed from this air emission license.

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

### **Heating Equipment**

3

	Maximum Capacity		Maximum Firing Rate	Date of
<u>Equipment</u>	(MMBtu/hr)	Fuel Type, % Sulfur	<u>(gal/hr)</u>	Manuf.
HYCO 200 Hot Oil Heater	2.0	distillate fuel, 0.5%	14.6	1999
111 CO 200 Hot On Heater	2.0	spec. waste oil, 0.7%	14.0	1000
AC Heater	1.3	distillate fuel, 0.5%	9.5	Pre-1973
AC Heater	1.3	spec. waste oil, 0.7%	9.5	116-1973

#### C. <u>Definitions</u>

<u>Distillate Fuel</u> 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. This definition does not include specification waste oil.

<u>Virgin oil</u> 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 Code of Maine Rules (C.M.R.) ch. 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:

Pollutant	Current License (TPY)	Future License (TPY)	Net Change (TPY)	Significant Emission Levels
PM	7.2	4.8	-2.4	100
PM <sub>10</sub>	7.2	4.8	-2.4	100
SO <sub>2</sub>	35.7	10.4	-25.3	100
NO <sub>x</sub>	36.7	24.4	-12.3	100
СО	65.9	42.7	-23.2	100
VOC	2.7	1.9	-0.8	50
CO <sub>2</sub> e	<100,000	<100,000	•	100,000

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

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 C.M.R. ch. 115 (as amended). With the annual production limit on HMA Batch Plant #42, the annual fuel limit on CAT 3412 and Diesel TEL48STD combined, and the annual fuel limit on the HYCO 200 Hot Oil Heater and the AC Heater combined, the facility is licensed below the major source thresholds for criteria pollutants and is considered a synthetic minor. With the annual production limit on HMA Batch Plant #42, the annual fuel limit on CAT 3412 and Diesel TEL48STD combined, and the annual fuel limit on the HYCO 200 Hot Oil Heater and the AC Heater combined, the facility is licensed below the major source thresholds for hazardous air pollutants (HAP) and is considered an area source of HAP.

4

#### 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 (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. Hot Mix Asphalt (HMA) Batch Plant #42

Lane operates an HMA batch plant (HMA Batch Plant #42) with a maximum hourly throughput of 120 ton/hr of asphalt and a 39 MMBtu/hr burner that is capable of firing distillate fuel with a maximum sulfur content of 0.5% by weight and specification waste oil with a maximum sulfur content of 0.7% by weight. In the past it has been assumed that there is a linear relationship between the fuel required for an HMA plant burner and the plant output. Meaning, it is 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 allows

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

for an HMA plant to have its annual emissions limited by placing a fuel limit on the burner.

5

However, in some cases it has been determined that the HMA plant is operated 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 HMA Batch Plant #42 shall not exceed 200,000 tons of HMA on a calendar year total basis.

### 1. BPT Findings

The BPT emission limits for HMA Batch Plant #42 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 product based on AP-42, Table 11.1-5, dated 3/04
NO<sub>x</sub> - 0.12 lb/ton product based on AP-42, Table 11.1-5, dated 3/04
CO - 0.40 lb/ton product based on AP-42, Table 11.1-5, dated 3/04
VOC - 0.0082 lb/ton product based on AP-42, Table 11.1-6, dated 3/04
Opacity - 06-096 C.M.R. ch. 101

The BPT emission limits for HMA Batch Plant #42 are the following:

	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
<u>Unit</u>	<u>(lb/hr)</u>	<u>(lb/hr)</u>	<u>(lb/hr)</u>	<u>(lb/hr)</u>	<u>(lb/hr)</u>	<u>(lb/hr)</u>
HMA Batch Plant #42	5.16	5.16	10.56	14.40	48.00	0.98

Per *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101, visible emissions from the asphalt 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. This is consistent with the 40 Code of Federal Regulations (C.F.R.) Part 60, Subpart I PM limit of 20% opacity.

General process emissions from equipment associated with HMA Batch Plant #42 shall be controlled so as to prevent visible emissions in

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

excess of 20% opacity on a six-minute block average basis except for no more than one six-minute block average in a one-hour period.

6

HMA Batch Plant #42 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. § 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 HMA Batch Plant #42 shall not exceed a sulfur content of 0.0015% by weight (15 ppm).

#### 2. New Source Performance Standards

HMA Batch Plant #42 was manufactured prior to 1973 and is therefore not subject to the federal 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 hot mix asphalt facilities constructed or modified after June 11, 1973.

#### 3. Control Equipment

PM emissions from HMA Batch Plant #42 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 HMA Batch Plant #42 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 HMA Batch Plant #42 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.

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

#### 5. Contaminated Soils

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 Maine regulation *Solid Waste Management Rules: Processing Facilities*, 06-096 C.M.R. ch. 409 (as amended). The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management.

7

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 [06-096 C.M.R. ch. 115, BPT].

#### C. Rock Crushers

Lane currently operates one rock crusher, SECTEL48STD, with a rated capacity of 210 tons/hour. Rock crusher SECTEL48STD was manufactured in 1972. Rock crusher SECTEL48STD is being added to this license from Lane's surrendered A-804-71-F-R license.

# 1. BPT Findings

The regulated pollutant from the rock crusher is particulate matter emissions. To meet the requirements of BPT for control of particulate matter emissions from the rock crusher, Lane shall maintain water sprays on the rock crusher and operate as needed to control visible emissions. Visible emissions from the rock crusher shall be limited to no greater than 10% opacity on a six-minute block average basis.

#### 2. New Source Performance Standards

EPA's NSPS Standards of Performance for Nonmetallic Mineral Processing Plants, 40 C.F.R. Part 60, Subpart OOO, applies to fixed rock crushers with capacities greater than 25 tons/hr and portable rock crushers with capacities greater than 150 tons/hr, constructed after August 31, 1983. Lane has chosen to comply with the requirements in Subpart OOO for SECTEL48STD, and

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

thus satisfy BPT. Lane successfully completed the performance testing required by Subpart OOO for rock crusher SECTEL48STD on May 13, 2004.

8

Requirements of 40 C.F.R. Part 60, Subpart OOO:

# a. Monitoring Requirements

Lane shall maintain records detailing the maintenance on particulate matter control equipment including spray nozzles. Lane shall perform monthly inspections of any water sprays to ensure water is flowing to the correct locations and initiate corrective action within 24 hours if water is found to not be flowing properly. Records of the date of each inspection and any corrective action required shall be included in the maintenance records. The maintenance records shall be kept on-site at the rock crushing location. [40 C.F.R. § 60.674(b)]

## b. Reporting and Recordkeeping Requirements

The rock crusher is subject to 40 C.F.R. Part 60, Subparts A and OOO, and Lane shall comply with the notification and recordkeeping requirements of 40 C.F.R. §§ 60.676 and 60.7, except for 40 C.F.R. § 60.7(a)(2) per 40 C.F.R. § 60.676(h). [40 C.F.R. §§ 60.676(b), (f), and (i)]

#### D. CAT 3412 and Diesel TEL48STD

CAT 3412 and Diesel TEL48STD are portable engines used to power pieces of equipment. CAT 3412 has a maximum capacity of 3.8 MMBtu/hr (395 KW) and Diesel TEL48STD has a maximum capacity of 2.2 MMBtu/hr (225 KW). Diesel TEL48STD is being added to this license from Lane's surrendered A-804-71-F-R license. Both generators fire distillate fuel. CAT 3412 was manufactured in 1988 and Diesel TEL48STD was manufactured in 1972. The fuel fired in both generators combined shall be limited to 40,000 gallons of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight) on a calendar year total basis.

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

### 1. BPT Findings

The BPT emission limits for CAT 3412 and Diesel TEL48STD were based on the following:

PM/PM<sub>10</sub> - 0.12 lb/MMBtu from 06-096 C.M.R. ch. 103 and 06-096

9

C.M.R. ch. 115, BPT

SO<sub>2</sub> - combustion of distillate fuel with a maximum sulfur content

not to exceed 15 ppm (0.0015% sulfur by weight)

NO<sub>x</sub> - 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 C.M.R. ch. 115, BPT

The BPT emission limits for CAT 3412 and Diesel TEL48STD are the following:

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

<u>Unit</u>	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
CAT 3412	0.46	0.46	0.01	16.93	3.65	1.34
Diesel TEL48STD	0.26	0.26	0.01	9.70	2.09	0.77

Visible emissions from CAT 3412 and Diesel TEL48STD shall each not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a three-hour period.

#### 2. New Source Performance Standards

CAT 3412 and Diesel TEL48STD are all considered non-road engines, as opposed to stationary engines, since they are portable and will be moved to various sites with the rock crusher. Additionally, all three units were manufactured prior to April 1, 2006. Therefore, CAT 3412 and Diesel TEL48STD are not subject to Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII.

### 3. National Emission Standards for Hazardous Air Pollutants

CAT 3412 and Diesel TEL48STD are all considered non-road engines, as opposed to stationary engines, since they are all portable and will be moved to various sites with the rock crusher. Therefore, CAT 3412 and

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

Diesel TEL48STD are not subject to National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion 40 C.F.R. Part 63, Subpart ZZZZ. The definition Engines, 40 C.F.R. § 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 C.F.R. § 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.

10

#### E. HYCO 200 Hot Oil Heater and AC Heater

Lane operates the HYCO 200 Hot Oil Heater and AC Heater to heat oil for heat transfer purposes. The HYCO 200 Hot Oil Heater has a maximum capacity of 2.0 MMBtu/hr, and the AC Heater has a maximum capacity of 1.3 MMBtu/hr. Both are capable of firing distillate fuel with a maximum sulfur content of 0.5% by weight and specification waste oil with a maximum sulfur content of 0.7% by weight. The HYCO 200 Hot Oil Heater was manufactured in 1999, and the AC Heater was manufactured prior to 1973.

#### 1. BPT Findings

The BPT emission limits for the HYCO 200 Hot Oil Heater and the AC Heater were based on the following:

PM/PM<sub>10</sub> - 0.08 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT SO<sub>2</sub> - based on firing spec. waste oil with a maximum sulfur content of 0.7% by weight (ASTM D396 compliant)

NO<sub>x</sub> - 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 C.M.R. ch. 101

11

The BPT emission limits for the HYCO 200 Hot Oil Heater and the AC Heater are the following:

<u>Unit</u>	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
HYCO 200 Hot Oil Heater	0.16	0.16	1.41	0.29	0.07	0.01
AC Heater	0.11	0.11	0.94	0.19	0.05	0.01

Visible emissions from the HYCO 200 Hot Oil Heater and AC Heater shall each not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period.

Lane shall be limited to 30,000 gallons/yr of distillate fuel and specification waste oil combined for the HYCO 200 Hot Oil Heater and AC Heater combined.

The HYCO 200 Hot Oil Heater and AC Heater are licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 38 M.R.S. § 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 HYCO 200 Hot Oil Heater and AC Heater shall not exceed a sulfur content of 0.0015% by weight (15 ppm).

### 2. Periodic Monitoring

Periodic monitoring for the HYCO 200 Hot Oil Heater and the AC Heater shall include recordkeeping to document fuel use both on a monthly and calendar year total basis. Documentation shall include the type and volume of fuel used and sulfur content of the fuel. Records shall also be maintained recording the quantity and analyzed test results of all specification waste oil fired in the hot oil heaters.

#### 3. New Source Performance Standards

The HYCO 200 Hot Oil Heater and AC Heater do not heat water. They do not meet the definition of a "steam generating unit" and therefore are not subject to NSPS Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, 40 C.F.R. Part 60, Subpart Dc, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

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

#### 4. National Emission Standards for Hazardous Air Pollutants

12

The HYCO 200 Hot Oil Heater and AC Heater do not heat water. They do not meet the definition of a "boiler" and therefore are not subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJJ.

### 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 minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20% in any one hour.

#### G. General Process Emissions

Visible emissions from any general process (including conveyor belts, transfer points, etc.) associated with an NSPS rock crusher shall not exceed 7% opacity based on the average of no less than five six-minute block averages.

Visible emissions from any other general process (non-NSPS crusher conveyor belts, bucket elevators, bagging operations, truck loading operations, etc.) shall not exceed 20% opacity on a six-minute block average basis except for no more than one six-minute block average in a one-hour period.

#### H. Annual Emissions

#### 1. Total 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 200,000 tons of HMA per year for HMA Batch Plant #42, 30,000 gal/yr of distillate fuel/specification waste oil for the HYCO 200 Hot Oil Heater and AC Heater combined, and 40,000 gal/yr of distillate fuel for CAT 3412 and Diesel TEL48STD combined:

# Total Licensed Annual Emissions for the Facility Tons/year

13

(used to calculate the annual license fee)

	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
HMA Batch Plant #42	4.3	4.3	8.8	12.0	40.0	0.8
CAT 3412 and Diesel TEL48 STD	0.3	0.3	0.1	12.1	2.6	1.0
HYCO 200 Hot Oil Heater and AC Heater	0.2	0.2	1.5	0.3	0.1	0.1
Total TPY	4.8	4.8	10.4	24.4	42.7	1.9

#### 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 C.F.R. Part 52, Subpart A, § 52.21, Prevention of Significant Deterioration of Air Quality rule. Greenhouse gases, as defined in 06-096 C.M.R. ch. 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 (CO<sub>2</sub>e).

The quantity of CO<sub>2</sub>e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's fuel use 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 *Mandatory Greenhouse Gas Reporting*, 40 C.F.R. Part 98; and
- global warming potentials contained in 40 C.F.R. 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 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:

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

<u>Pollutant</u>	Tons/Year
PM <sub>10</sub>	25
$SO_2$	50
NO <sub>x</sub>	50
СО	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-54-71-M-R/A, subject to the following conditions.

<u>Severability</u>. 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. § 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 C.M.R. ch. 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

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

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 C.M.R. ch. 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 C.M.R. ch. 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]

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

- (11) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. 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 C.F.R. 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 C.M.R. ch. 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 C.F.R. 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 C.M.R. ch. 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

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

the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 C.M.R. ch. 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 C.M.R. ch. 115]

17

(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 C.M.R. ch. 115]

#### **SPECIFIC CONDITIONS**

# (16) Hot Mix Asphalt (HMA) Batch Plant #42 (120 tons/hr)

#### A. Fuel Use

- 1. HMA Batch Plant #42 is licensed to fire distillate fuel with a maximum sulfur content of 0.5% by weight and specification waste oil with a maximum sulfur content of 0.7% by weight. [06-096 C.M.R. ch. 115, BPT]
- 2. 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 HMA Batch Plant #42. [06-096 C.M.R. ch. 115, BPT]
- 3. Compliance shall be demonstrated by fuel records from the supplier showing the type and percent sulfur of the fuel delivered. [06-096 C.M.R. ch. 115, BPT]
- 4. A log shall be maintained recording the quantity and analyzed test results of all specification waste oil fired in HMA Batch Plant #42. [06-096 C.M.R. ch. 115, BPT and 06-096 C.M.R. ch. 860]
- B. The production rate of HMA Batch Plant #42 shall not exceed 200,000 tons of HMA per year. Production records shall be kept on a monthly and calendar year total basis. [06-096 C.M.R. ch. 115, BPT]

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

C. Emissions from HMA Batch Plant #42 shall vent to a baghouse, and all components of HMA Batch Plant #42 shall be maintained so as to prevent PM leaks. [06-096 C.M.R. ch. 115, BPT]

- D. The performance of the baghouse shall be constantly monitored by either one of the following at all times HMA Batch Plant #42 is operating [06-096 C.M.R. ch. 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 C.M.R. ch. 115, BPT]
- F. Emissions from the HMA Batch Plant #42 baghouse shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

<u>Pollutant</u>	grs/dscf	<u>lb/hr</u>
PM	0.03	5.16
$PM_{10}$	***	5.16
$SO_2$	-	10.56
NO <sub>X</sub>	-	14.40
CO	-	48.00
VOC	-	0.98

- G. Visible emissions from the HMA Batch Plant #42 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. [06-096 C.M.R. ch. 101]
- H. General process emissions from equipment associated with HMA Batch Plant #42 shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six-minute block average basis except for no more than one six-minute block average in a one-hour period. [06-096 C.M.R. ch. 101]

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

- I. 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 06-096 C.M.R. ch. 409. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management. [06-096 C.M.R. ch. 115, BPT]
- J. Lane shall not process soils which are classified as hazardous waste or which have unknown contaminants. [06-096 C.M.R. ch. 115, BPT]
- K. 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 C.M.R. ch. 115, BPT]

### (17) Rock Crusher

- A. Lane shall maintain spray nozzles for particulate control on rock crusher SECTEL48STD and operate them as necessary to limit visible emissions to no greater than 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT and 06-096 C.M.R. ch. 101]
- B. Lane shall maintain records detailing and quantifying the hours of operation on a daily basis for rock crusher SECTEL48STD. The operation records shall be kept on-site at the rock crushing location. [06-096 C.M.R. ch. 115, BPT]
- C. Lane shall maintain records detailing the maintenance on particulate matter control equipment (including spray nozzles). For the months during which the rock crusher is operating, Lane shall perform monthly inspections of any water sprays to ensure water is flowing to the correct locations and initiate corrective action within 24 hours if water is found to not be flowing properly. Records of the date of each inspection and any corrective action required shall be included in the maintenance records. The maintenance records shall be kept on-site at the rock crushing location. [06-096 C.M.R. ch. 115, BPT and 40 C.F.R. § 60.674(b)]

20

D. Rock crusher SECTEL48STD is subject to 40 C.F.R. Part 60 Subparts A and OOO, and Lane shall comply with the notification and record keeping requirements of 40 C.F.R. §§ 60.676 and 60.7, except for 40 C.F.R. § 60.7(a)(2) per 40 C.F.R. § 60.676(h). [40 C.F.R. §§ 60.676(b), (f), and (i)]

#### (18) CAT 3412 and Diesel TEL48STD

#### A. Fuel Use

- 1. CAT 3412 and Diesel TEL48STD are licensed to fire distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight). [06-096 C.M.R. ch. 115, BPT]
- 2. Total fuel use for CAT 3412 and Diesel TEL48STD combined shall not exceed 40,000 gal/yr of distillate fuel. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and percent sulfur of the fuel delivered. Records of annual fuel use shall be kept on a monthly and calendar year total basis. [06-096 C.M.R. ch. 115, BPT]
- B. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
CAT 3412	PM	0.12	06-096 C.M.R. ch. 103(2)(B)(1)(a)

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

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
CAT 3412	0.46	0.46	0.01	16.93	3.65	1.34
Diesel TEL48STD	0.26	0.26	0.01	9.70	2.09	0.77

D. Visible emissions from CAT 3412 and Diesel TEL48STD shall each 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. [06-096 C.M.R. ch. 115, BPT]

# (19) **HYCO 200 Hot Oil Heater and AC Heater**

#### A. Fuel Use

1. The HYCO 200 Hot Oil Heater and AC Heater are licensed to fire distillate fuel with a maximum sulfur content of 0.5% by weight and specification waste oil with a maximum sulfur content of 0.7% by weight. [06-096 C.M.R. ch. 115, BPT]

21

- 2. Total fuel use for the HYCO 200 Hot Oil Heater and AC Heater combined shall not exceed 30,000 gal of distillate fuel and specification waste oil combined on a calendar year total basis. [06-096 C.M.R. ch. 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 HYCO 200 Hot Oil Heater and AC Heater. [06-096 C.M.R. ch. 115, BPT]
- 4. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and percent sulfur of the fuel delivered. Records of annual fuel use shall be kept on a monthly and calendar year total basis. [06-096 C.M.R. ch. 115, BPT]
- 5. A log shall be maintained recording the quantity and analyzed test results of all specification waste oil fired in the HYCO 200 Hot Oil Heater and the AC Heater. [06-096 C.M.R. ch. 115, BPT and 06-096 C.M.R. ch. 860]
- B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

	PM	$PM_{10}$	$SO_2$	NO <sub>x</sub>	CO	VOC
<u>Unit</u>	<u>(lb/hr)</u>	<u>(lb/hr)</u>	<u>(lb/hr)</u>	<u>(lb/hr)</u>	<u>(lb/hr)</u>	<u>(lb/hr)</u>
HYCO 200 Hot Oil Heater	0.16	0.16	1.41	0.29	0.07	0.01
AC Heater	0.11	0.11	0.94	0.19	0.05	0.01

C. Visible emissions from the HYCO 200 Hot Oil Heater and AC Heater shall each not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a continuous three-hour period. [06-096 C.M.R. ch. 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 minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20% in any one hour. [06-096 C.M.R. ch. 101]

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

### (21) General Process Sources

Visible emissions from any general process (including conveyor belts, transfer points, etc.) associated with an NSPS rock crusher shall not exceed 7% opacity based on the average of no less than five six-minute block averages. [40 C.F.R. 60, Subpart OOO]

Visible emissions from any other general process (non-NSPS crusher conveyor belts, bucket elevators, bagging operations, truck loading operations, etc.) shall not exceed 20% opacity on a six-minute block average basis except for no more than one six-minute block average in a one-hour period. [06-096 C.M.R. ch. 115, BPT]

# (22) Equipment Relocation [06-096 C.M.R. ch. 115, BPT]

A. Lane shall notify the Department, 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: <a href="https://www.maine.gov/dep/air/compliance/forms/relocation">www.maine.gov/dep/air/compliance/forms/relocation</a>

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 C.M.R. ch. 115, BPT]

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

(24) Lane shall notify the Department within 48 hours and submit a report to the Department on a <u>quarterly basis</u> if a malfunction or breakdown in any component causes a violation of any emission standard [38 M.R.S. § 605].

23

DONE AND DATED IN AUGUSTA, MAINE THIS 2 DAY OF Forugry, 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Mare Mentolet love for PAUL MERCER, 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 M.R.S. § 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: 2/23/2015

Date of application acceptance: 2/23/2015

Date filed with the Board of Environmental Protection:

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

