**The Lane Construction Corporation**
**Aroostook County**
**Presque Isle, Maine**
**A-363-71-M-R/A (SM)**

**Departmental**
**Findings of Fact and Order**
**Air Emission License**
**Renewal and Minor Revision**

## 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 emission sources associated with their portable hot mix asphalt (HMA) batch plant, concrete batch plant and crushed stone and gravel facility.

Lane has requested an amendment to their license in order to add CAT 3304 and Concrete Batch Plant #25 from their surrendered A-286 license, to remove one crusher (SEC48SYM) and one generator (CAT 334) from the license, which were both sold in 2013, to change the production rate of Concrete Batch Plant #18 from 60 cubic yards/hr to 228 cubic yards/hr, and to include a fuel limit of 4,200 MMBtu/year (equivalent to 30,000 gal/yr of distillate fuel) for the Heatec HCS-175.

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 300,000 tons of HMA per year to replace the previously licensed fuel limit of 126,000 MMBtu/year for HMA Batch Plant #23 and the Heatec HCS-175 Hot Oil Heater combined.

The equipment addressed in this license is located at 458 Reach Road, Presque Isle, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

**Hot Mix Asphalt (HMA) Plant**

| Equipment | Process Rate (tons/hour) | Maximum Capacity (MMBtu/hr) | Fuel Type, % Sulfur | Firing Rate | Control Devices | Date of Manuf. |
|---|---|---|---|---|---|---|
| Hot Mix Asphalt (HMA) Batch Plant #23 | 180 | 75.6 | Distillate fuel, 0.5% Spec. waste oil, 0.7% | 540 gal/hr | Baghouse | Pre-1973 |
| | | | Propane, negl. | 835.4 gal/hr | | |
| | | | Natural Gas, negl. | 73,398 scf/hr | | |

**Concrete Plant**

| Equipment | Production Rate (cubic yards/hour) | Control Devices |
|---|---|---|
| Concrete Batch Plant #18 | 228 | Baghouse |
| Concrete Batch Plant #25* | 60 | Baghouse |

*Previously included in license A-286

**Rock Crushers**

| Unit ID | Powered | Process Rate (tons/hour) | Date of Manufacture | Control Device |
|---|---|---|---|---|
| PRI3850P | Commercial | 450 | Pre-1973 | Spray Nozzles |
| TER636AC | Commercial/Generator | 100 | Pre-1973 | Spray Nozzles |
| TER12BHT | Commercial/Generator | 60 | Pre-1973 | Spray Nozzles |
| TERCAGE | Commercial/Generator | 30 | Pre-1973 | Spray Nozzles |
| TER5040CR | Commercial/Generator | 200 | Pre-1973 | Spray Nozzles |
| TER77VSI | Commercial | 400 | 1993 | Spray Nozzles |
| SECHAZEMAG | Commercial | 400 | 1987 | Spray Nozzles |

**Generator**

| Equipment | Maximum Capacity (MMBtu/hr) | Firing Rate (gal/hr) | Fuel Type, % sulfur | Date of Manuf. |
|---|---|---|---|---|
| CAT 3304* | 1.1 | 8 | Distillate fuel, 0.0015% | 1990 (est.) |

*Previously included in license A-286

**Boiler**

| Equipment | Maximum Capacity (MMBtu/hr) | Maximum Firing Rate (gal/hr) | Fuel Type, % sulfur | Date of Manuf. |
|---|---|---|---|---|
| Omnia K-76 | 3.2 | 23 | Distillate fuel, 0.5% | 1982 |

**Heating Equipment**

| Equipment | Maximum Capacity (MMBtu/hr) | Fuel Type, % Sulfur | Maximum Firing Rate | Date of Manuf. |
|---|---|---|---|---|
| Heatec HCS-175 | 2.0 MMBtu/hr | Distillate fuel, 0.5% | 14.5 gal/hr | 1995 |
| | | Propane | 22.1 gal/hr | |
| | | Natural Gas | 1942 scf/hr | |

**Storage Silos**

| Equipment | Storage Capacity (tons) | Date of Installation | Control Device |
|---|---|---|---|
| Storage Silo H23A | 150 | 1995 | - |
| Storage Silo H23B | 150 | 1995 | - |
| Storage Silo C18A | 100 | 1990 | Filter vent |
| Storage Silo C18B | 150 | 1990 | Filter vent |
| Storage Silo C25A | 75 | 1980 | Filter vent |

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:

| Pollutant | Current License (TPY) | Future License (TPY) | Net Change (TPY) | Significant Emission Levels |
|---|---|---|---|---|
| PM | 9.9 | 9.0 | -0.9 | 100 |
| $PM_{10}$ | 9.9 | 9.0 | -0.9 | 100 |
| $SO_2$ | 16.1 | 15.5 | -0.6 | 100 |
| $NO_x$ | 27.1 | 24.6 | -2.5 | 100 |
| CO | 69.4 | 61.5 | -7.9 | 100 |
| VOC | 5.9 | 6.1 | +0.2 | 50 |
| $CO_2e$ | <100,000 | <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 CMR 115 (as amended). With the annual fuel limit on Omnia K-76, Heatec HCS-175, and CAT 3304 and the annual throughput limit on HMA Batch Plant #23, the facility is licensed below the major source thresholds for criteria pollutants and is considered a synthetic minor. With the annual fuel limit on Omnia K-76, HCS-175, and CAT 3304 and the annual throughput limit on HMA Batch Plant #23, 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 (BPT)

### A. Introduction

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

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

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 #23

Lane operates an HMA batch plant (Hot Mix Asphalt (HMA) Batch Plant #23) with a maximum hourly throughput of 180 ton/hr of HMA and a 75.6 MMBtu/hr burner that is 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 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 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 batch plant shall not exceed 300,000 tons of HMA per year on a calendar year total basis.

HMA Batch Plant #23 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 fired in HMA Batch Plant #23 shall not exceed 0.0015% by weight (15 ppm) except that any existing distillate fuel purchased or otherwise obtained by the facility prior to July 1, 2018 may be used until depleted.

1. BPT

The BPT emission limits for HMA Batch Plant #23 when firing distillate fuel and specification waste oil were based on the following:

| | | |
|---|---|---|
| $PM/PM_{10}$ | – | 0.03 gr/dscf and the use of a baghouse |
| $SO_2$ | – | 0.088 lb/ton HMA based on AP-42, Table 11.1-5, dated 3/04 |
| $NO_x$ | – | 0.12 lb/ton HMA based on AP-42, Table 11.1-5, dated 3/04 |
| CO | – | 0.40 lb/ton HMA based on AP-42, Table 11.1-5, dated 3/04 |
| VOC | – | 0.036 lb/ton HMA based on AP-42, Table 11.1-6, dated 3/04 |
| Opacity | – | 06-096 CMR 101 |

The BPT emission limits for HMA Batch Plant #23 when firing natural gas and propane were based on the following:

| | | |
|---|---|---|
| $PM/PM_{10}$ | – | 0.03 gr/dscf and the use of a baghouse |
| $SO_2$ | – | 0.0046 lb/ton HMA based on AP-42, Table 11.1-5, dated 3/04 |
| $NO_x$ | – | 0.025 lb/ton HMA based on AP-42, Table 11.1-5, dated 3/04 |
| CO | – | 0.40 lb/ton HMA based on AP-42, Table 11.1-5, dated 3/04 |
| VOC | – | 0.0082 lb/ton HMA based on AP-42, Table 11.1-6, dated 3/04 |
| Opacity | – | 06-096 CMR 101 |

The BPT emission limits for HMA Batch Plant #23 are the following:

| Unit | PM (lb/hr) | $PM_{10}$ (lb/hr) | $SO_2$ (lb/hr) | $NO_x$ (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---|---|---|---|---|---|---|
| HMA Batch Plant #23 (distillate fuel/spec. waste oil) | 10.03 | 10.03 | 15.84 | 21.60 | 72.00 | 6.48 |
| HMA Batch Plant #23 (natural gas/propane) | 10.03 | 10.03 | 0.83 | 4.50 | 72.00 | 1.48 |

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

General process emissions from HMA Batch Plant #23 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 1-hour period.

2. New Source Performance Standards

HMA Batch Plant #23 was manufactured prior to 1973 and is therefore not 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 emissions from HMA Batch Plant #23 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 #23 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.

A log shall also be maintained recording the quantity and analyzed test results of all specification waste oil fired in HMA Batch Plant #23.

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 Solid Waste Management Rules, 06-096 CMR 409 (as amended). The material shall be handled in accordance with the requirements 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 [06-096 CMR 115, BPT].

C. Concrete Batch Plants

The concrete batch plants, #18 Concrete Batch Plant and #25 Concrete Batch Plant are rated at 228 and 60 cubic yards/hour, respectively and include three silos, Storage Silos C18A, C18B, and C25A. The #18 Concrete Batch Plant was previously licensed at 60 cubic yards/hr, but this license corrects the rating to 228 cubic yards/hr.

To meet the requirements of BPT for control of particulate matter (PM) emissions from Storage Silos C18A, C18B, and C25A, particulate emissions shall be vented through a filter vent maintained for 99% removal efficiency. Visible emissions from each cement silo filter vent are limited to no greater than 10% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hour period. The facility shall take corrective action if visible emissions from the baghouses exceed 5% opacity.

All components of the concrete batch plant shall be maintained so as to prevent PM leaks. Visible emissions from concrete batching operations 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 1-hour period.

D. Rock Crushers

Lane currently operates three portable rock crushers, PRI3850P, TER77VSI, and SECHAZEMAG, with rated capacities of 450, 400, and 400 tons/hour respectively. Four additional rock crushers (TER636AC, TER12BHT, TERCAGE, and TER5040CR) are currently idle, but may be restarted in the future with a power source to be determined. These units have rated capacities of 100, 60, 30, and 200 tons/hour respectively.

Rock Crushers PRI3850P, TER636AC, TER12BHT, TERCAGE, and TER5040CR were manufactured prior to 1973. Rock crushers TER77VSI and SECHAZEMAG were manufactured in 1993 and 1987, respectively.

1. BPT Findings

   The regulated pollutant from the rock crushers is particulate matter emissions. To meet the requirements of BPT for control of particulate matter emissions from the rock crushers, Lane shall maintain water sprays on the rock crushers and operate as needed to control visible emissions. Visible emissions from the rock crushers shall be limited to no greater than 10% opacity on a six (6) minute block average basis.

2. New Source Performance Standards

   Rock crushers TER77VSI and SECHAZEMAG are subject to EPA New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after August 31, 1983, with capacities greater than 150 tons/hr for portable plants and greater than 25 tons/hr for non-portable plants based on the size and manufacture dates of the crushers. The performance testing required by Subpart OOO was successfully completed for both TER77VSI and SECHAZEMAG on September 28, 2012.

   Rock crushers PRI3850P and TER5040CR have a maximum throughput rating greater than 150 tons/hr, but were manufactured prior to 1983. However, the Department has determined that due to the age of the crushers and the considerable impacts crusher equipment operates under, it is likely that the crushers went through a reconstruction or modification after August 31, 1983 and are therefore subject to EPA's New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart OOO.
   If TER5040CR is run again, an initial performance test for TER5040CR must be completed within 60 days after achieving the maximum production rate at which the unit will be operated, but no later than 180 days after initial startup of the unit. If the initial performance test for a facility falls within a seasonal shutdown, then with approval from the Department, the initial performance test may be postponed until no later than 60 calendar days after resuming operation of the affected equipment. The performance testing required by Subpart OOO for PRI3850P was successfully completed on September 28, 2012.

E. <u>CAT 3304</u>

CAT 3304 is a portable engine used to power pieces of equipment. CAT 3304 has a maximum design heat input capacity of 1.1 MMBtu/hr, a maximum firing rate of 8 gal/hour, and fires distillate fuel with a maximum sulfur content of 0.0015% by weight. CAT 3304 was manufactured in 1990 and is a CAT Engine Model 3304. CAT 3304 is being transferred from Lane's A-286 Air Emission License to replace CAT 334, which was sold in 2013. CAT 3304 shall be limited to 20,000 gallons/year of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight) on a calendar year total basis.

1. BPT

The BPT emission limits for CAT 3304 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 table 3.3-1, dated 10/96 |
| CO | - 0.95 lb/MMBtu from AP-42 table 3.3-1, dated 10/96 |
| VOC | - 0.35 lb/MMBtu from AP-42 table 3.3-1, dated 10/96 |
| Opacity | - 06-096 CMR 115, BPT |

The BPT emission limits for CAT 3304 are the following:

| Unit | PM (lb/hr) | $PM_{10}$ (lb/hr) | $SO_2$ (lb/hr) | $NO_x$ (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---|---|---|---|---|---|---|
| CAT 3304 | 0.13 | 0.13 | 0.01 | 4.85 | 1.05 | 0.39 |

Visible emissions from CAT 3304 shall not exceed 20% opacity on a 6-minute block average, except for no more than two (2) six (6) minute block averages in a 3-hour period.

2. New Source Performance Standards

CAT 3304 is considered a non-road engine, as opposed to a stationary engine, since CAT 3304 is portable and will be moved to various sites. Therefore, CAT 3304 is not subject to New Source Performance Standards 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.*

3. National Emission Standards for Hazardous Air Pollutants

CAT 3304 is considered a non-road engine, as opposed to a stationary engine, since CAT 3304 is portable and will be moved to various sites. Therefore, CAT 3304 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.

F. Omnia K-76

Lane operates the boiler Omnia K-76 with a maximum design heat input capacity of 3.2 MMBtu/hr and a maximum firing rate of 23 gal/hr to produce low pressure steam and hot water for heating the bins and water used for concrete in the winter. Omnia K-76 fires distillate fuel with a maximum sulfur content of 0.5% by weight, was installed in 1982, and exhausts through its own stack. Fuel use for Omnia K-76 is limited to 30,000 gal/yr of distillate fuel with a maximum sulfur content of 0.5% by weight based on a calendar year total basis.

Omnia K-76 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 fired in Omnia K-76 shall not exceed 0.0015% by weight (15 ppm) except that any existing distillate fuel purchased (or otherwise obtained) by the facility prior to July 1, 2018 may be used until depleted.

1. BPT Findings

The BPT emission limits for Omnia K-76 were based on the following:

| | | |
|---|---|---|
| $PM/PM_{10}$ | – | 0.08 lb/MMBtu based on 06-096 CMR 115, BPT |
| $SO_2$ | – | based on firing distillate fuel with a sulfur content of 0.5% sulfur 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 Omnia K-76 are the following:

| Unit | Pollutant | lb/MMBtu |
|---|---|---|
| Omnia K-76 | PM | 0.08 |

| Unit | PM (lb/hr) | $PM_{10}$ (lb/hr) | $SO_2$ (lb/hr) | $NO_x$ (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---|---|---|---|---|---|---|
| Omnia K-76 | 0.26 | 0.26 | 1.61 | 0.46 | 0.11 | 0.01 |

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

2. Periodic Monitoring

Periodic monitoring for Omnia K-76 shall include recordkeeping to document fuel use both on a monthly and calendar year total basis. Documentation shall include the type of fuel used and sulfur content of the fuel.

3. 40 CFR Part 60, Subpart Dc

Due to the size and manufacture date of Omnia K-76, it is not subject to the 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. 40 CFR Part 63, Subpart JJJJJJ

Omnia K-76 is subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJJ). The unit is considered an existing oil boiler rated less than 10 MMBtu/hr.
A summary of the currently applicable federal 40 CFR Part 63 Subpart JJJJJJ requirements is listed below. At this time, the Department has not taken delegation of this area source MACT (Maximum Achievable Control Technology) rule promulgated by EPA, however Lane is still subject to the requirements. Notification forms and additional rule information can be found on the following website: http://www.epa.gov/ttn/atw/boiler/boilerpg.html.

a. Compliance Dates, Notifications, and Work Practice Requirements

(1) Initial Notification of Compliance

An Initial Notification should have been submitted to EPA by January 20, 2014 [40 CFR Part 63.11225(a)(2)]

(2) Boiler Tune-Up Program

(i) A boiler tune-up program shall be implemented. [40 CFR Part 63.11223]
(ii) Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

| Boiler Category | Tune-Up Frequency |
|---|---|
| With a heat input capacity of <5MMBtu/hr | Every 5 years |

[40 CFR Part 63.11223(a) and Table 2]

(iii)The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:

1. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hr, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR Part 63.11223(b)(1)]
2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR Part 63.11223(b)(2)]
3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hr, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR Part 63.11223(b)(3)]
4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 63.11223(b)(4)]
5. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR Part 63.11223(b)(5)]
6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 CFR Part 63.11223(b)(7)]

(iv) Tune-Up Report: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:

1. The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;

2. A description of any corrective actions taken as part of the tune-up of the boiler; and

3. The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

[40 CFR §63.11223(b)(6)]

(v) After conducting the initial boiler tune-up, a Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(b)]

(3) Compliance Report:

A compliance report shall be prepared by March 1st every five years which covers the previous five calendar years. The report shall be maintained by the source and submitted to the Department and to the EPA upon request. The report must include the items contained in §63.11225(b)(1) and (2), including the following: [40 CFR §63.11225(b)]

(i) Company name and address;

(ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;

(iii) A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;

(iv) The following certifications, as applicable:

1. "This facility complies with the requirements in 40 CFR §63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
2. "No secondary materials that are solid waste were combusted in any affected unit."
3. "This facility complies with the requirement in 40 CFR §§63.11214(d) to conduct a tune-up of each applicable boiler according to 40 CFR §63.11223(b)."

b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63, Subpart JJJJJJ including the following [40 CFR Part 63.11225(c)]:

(1) Copies of notifications and reports with supporting compliance documentation;
(2) Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
(3) Records of the occurrence and duration of each malfunction of each applicable boiler; and
(4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. [63.1125(a)(4)(vi)]

G. Heatec HCS-175

Heatec HCS-175 has a maximum heat input capacity of 2.0 MMBtu/hr and is capable of firing distillate fuel with a sulfur content of 0.5% by weight, propane, and natural gas in the process of heating oil for heat transfer purposes. Heatec HCS-175 was manufactured in 1995. Fuel use for the Heatec HCS-175 hot oil heater shall not exceed the equivalent of 4,200 MMBtu/year for all fuel combined on a calendar year total (approximately 30,000 gal/yr of distillate fuel). When converting fuel use to MMBtu, Lane shall use heating values of 0.14 MMBtu/gallon for distillate fuel, 0.00103 MMBtu/scf for natural gas and 0.0905 MMBtu/gallon for propane. Heatec HCS-175 shares a fuel tank with HMA Batch Plant #23, but fuel use for each unit will be monitored and recorded separately.

Heatec HCS-175 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 fired in Heatec HCS-175 shall not exceed 0.0015% by weight (15 ppm) except that any existing distillate fuel purchased (or otherwise obtained) by the facility prior to July 1, 2018 may be used until depleted.

1. BPT

The BPT emission limits for Heatec HCS-175 when firing distillate fuel were based on the following:

| | | |
|---|---|---|
| $PM/PM_{10}$ | – | 0.08 lb/MMBtu for distillate fuel based on 06-096 CMR 115, BPT |
| $SO_2$ | – | based on firing distillate fuel with a sulfur content of 0.5% sulfur 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 Heatec HCS-175 when firing propane or natural gas were based on the following:

| | | |
|---|---|---|
| $PM/PM_{10}$ | – | 0.05 lb/MMBtu for propane and natural gas based on 06-096 CMR 115, BPT |
| $SO_2$ | – | 0.6 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98 |
| $NO_x$ | – | 100 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98 |
| CO | – | 84 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98 |
| VOC | – | 5.5 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98 |
| Opacity | – | 06-096 CMR 101, BPT |

The BPT emission limits for Heatec HCS-175 are the following:

| Unit | PM (lb/hr) | $PM_{10}$ (lb/hr) | $SO_2$ (lb/hr) | $NO_x$ (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---|---|---|---|---|---|---|
| Heatec HCS-175 (distillate fuel) | 0.16 | 0.16 | 1.01 | 0.29 | 0.07 | 0.01 |
| Heatec HCS-175 (natural gas/propane) | 0.10 | 0.10 | 0.01 | 0.19 | 0.16 | 0.01 |

Visible emissions from Heatec HCS-175 when firing distillate fuel shall not exceed 20% opacity on a 6-minute block average, except for no more than one (1) six (6) minute block average in a 3-hour period.

Visible emissions from Heatec HCS-175 when firing natural gas or propane shall not exceed 10% opacity on a 6-minute block average, except for no more than one (1) six (6) minute block average in a 3-hour period.

2. Periodic Monitoring

   Lane shall keep records of fuel use and receipts for Heatec HCS-175 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.

3. New Source Performance Standards

   The Heatec HCS-175 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 Heatec HCS-175 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 JJJJJJ).

H. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 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.

I. General Process Emissions

Visible emissions from any general process (including conveyor belts, transfer points, etc.) associated with an NSPS rock crusher shall not exceed an opacity of 7% based on the average of no less than five (5) six (6) minute block averages.

Visible emissions from any general process (non-NSPS crusher conveyor belts, bucket elevators, bagging operations, truck loading operations, etc.) shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

J. 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 a limit of 20,000 gal/yr distillate fuel with a maximum sulfur content of 0.0015% by weight for CAT 3304,

30,000 gal/yr of distillate fuel with a maximum sulfur content of 0.5% by weight for Omnia K-76, 300,000 ton/yr of HMA production for Hot Mix Asphalt (HMA) Batch Plant #23, and 4,200 MMBtu/yr for Heatec HCS-175:

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

| | PM | $PM_{10}$ | $SO_2$ | $NO_x$ | CO | VOC |
|---|---|---|---|---|---|---|
| HMA Batch Plant #23 | 8.4 | 8.4 | 13.2 | 18.0 | 60.0 | 5.4 |
| CAT 3304 generator | 0.2 | 0.2 | 0.1 | 6.0 | 1.3 | 0.5 |
| Omnia K-76 boiler | 0.2 | 0.2 | 1.1 | 0.3 | 0.1 | 0.1 |
| Heatec HCS-175 | 0.2 | 0.2 | 1.1 | 0.3 | 0.1 | 0.1 |
| **Total TPY** | **9.0** | **9.0** | **15.5** | **24.6** | **61.5** | **6.1** |

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 ($CO_2e$).

The quantity of $CO_2e$ emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's fuel use 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:

| Pollutant | Tons/Year |
|---|---|
| $PM_{10}$ | 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, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-363-71-M-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) **Hot Mix Asphalt (HMA) Batch Plant #23**

A. Fuel Use

1. HMA Batch Plant #23 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.
2. Prior to July 1, 2018, Lane shall fire distillate fuel with a maximum sulfur content not to exceed 0.5% by weight in HMA Batch Plant #23. [06-096 CMR 115, BPT]
3. Beginning July 1, 2018, Lane shall fire distillate fuel with a maximum sulfur content not to exceed 0.0015% by weight (15 ppm) in HMA Batch Plant #23 except that any existing distillate fuel purchased or otherwise obtained by Lane prior to July 1, 2018 may be used until depleted. [06-096 CMR 115, BPT]
4. Compliance shall be demonstrated by fuel records from the supplier showing the type and the 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 HMA Batch Plant #23. [06-096 CMR 115, BPT and 06-096 CMR 860]

B. The production rate of HMA Batch Plant #23 shall not exceed 300,000 tons of HMA per year. Production records shall be kept on a monthly and calendar year total basis. [06-096 CMR 115, BPT]

C. Emissions from HMA Batch Plant #23 shall vent to a baghouse, and all components of HMA Batch Plant #23 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 HMA 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%, HMA Batch Plant #23 is operating with insufficient control and corrective action shall be taken immediately.

E. To document maintenance of the baghouse, Lane shall keep a maintenance log recording the date and location of all bag failures as well as all routine maintenance. The maintenance log shall be kept on-site at the HMA plant location. [06-096 CMR 115, BPT]

F. Emissions from the HMA Batch Plant #23 baghouse shall not exceed the following [06-096 CMR 115, BPT]:

| Pollutant | grs/dscf | lb/hr Distillate fuel, Spec. waste oil | lb/hr propane, natural gas |
|---|---|---|---|
| PM | 0.03 | 10.03 | 10.03 |
| $PM_{10}$ | - | 10.03 | 10.03 |
| $SO_2$ | - | 15.84 | 0.83 |
| $NO_X$ | - | 21.6 | 4.5 |
| CO | - | 72.0 | 72.0 |
| VOC | - | 6.48 | 1.48 |

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 3-hour period. [06-096 CMR 101]

H. General process emissions from HMA Batch Plant #23 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 1-hour period. [06-096 CMR 101]

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 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]

J. Lane shall not process soils which are classified as hazardous waste or which have unknown contaminants. [06-096 CMR 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 CMR 115, BPT]

(17) **Concrete Batch Plants**

A. Particulate emissions from the cement silos shall be vented through a baghouse and all components of the concrete batch plants shall be maintained so as to prevent PM leaks. [06-096 CMR 115, BPT]

B. To document maintenance of the cement silo baghouses, the licensee shall keep a maintenance log recording the date and location of all bag failures as well as all routine maintenance. The maintenance log shall be kept on-site at the concrete batch plant location. [06-096 CMR 115, BPT]

C. Opacity from the cement silo baghouses is limited to no greater than 10% on a 6 minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. Lane shall take corrective action if visible emissions from the baghouses exceed 5% opacity. [06-096 CMR 101]

D. PM emissions from the concrete batching operations 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 1-hour period. [06-096 CMR 101]

(18) **Rock Crushers**

A. Lane shall maintain spray nozzles for particulate control on PRI3850P, TER77VSI, and SECHAZEMAG and operate them as necessary to limit visible emissions to no greater than 10% opacity on a six (6) minute block average basis. [06-096 CMR 115, BPT and 06-096 CMR 101]

B. If they are operated, Lane shall maintain spray nozzles for particulate control on rock crushers TER636AC, TER12BHT, TERCAGE, and TER5040CR and operate them as necessary to limit visible emissions to no greater than 10% opacity on a six (6) minute block average basis. [06-096 CMR 115, BPT and 06-096 CMR 101]

C. Lane shall maintain a log detailing and quantifying the hours of operation on a daily basis for all of the rock crushers. The operation log shall be kept on-site at the rock crushing location. [06-096 CMR 115, BPT]

D. Lane shall maintain a log detailing the maintenance on particulate matter control equipment (including spray nozzles). For the months during which the rock crushers are 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 log. The maintenance log shall be kept on-site at the rock crushing location. [06-096 CMR 115, BPT]

E. Rock crushers PRI3850P, TER5040CR, TER77VSI, and SECHAZEMAG are subject to 40 CFR Part 60 Subparts A and OOO and Lane shall comply with the notification and record keeping requirements of 40 CFR Part 60.676 and Part 60.7, except for Section (a)(2) of 60.7 per Subpart OOO, §60.676(h).

F. If operated, an initial performance test for TER5040CR must be completed within 60 days after achieving the maximum production rate at which the unit will be operated, but no later than 180 days after initial startup of the unit. If the initial performance test for a facility falls within a seasonal shutdown, then with approval from the Department, the initial performance test may be postponed until no later than 60 calendar days after resuming operation of the affected equipment. [06-096 CMR 115, BPT]

G. Lane shall submit a test notice to the regional inspector at least 7 days prior to conducting a performance test. [06-096 CMR 115, BPT]

(19) **CAT 3304**

A. Fuel Use

1. CAT 3304 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, BPT]
2. Total fuel use for CAT 3304 shall not exceed 20,000 gal/yr 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 total basis. [06-096 CMR 115, BPT]

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

| Unit | PM (lb/hr) | $PM_{10}$ (lb/hr) | $SO_2$ (lb/hr) | $NO_x$ (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---|---|---|---|---|---|---|
| CAT 3304 | 0.13 | 0.13 | 0.01 | 4.85 | 1.05 | 0.39 |

C. Visible emissions from CAT 3304 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 3-hour period. [06-096 CMR 115, BPT]

(20) **Omnia K-76**

A. Fuel Use

1. Total fuel use for the Omnia K-76 boiler shall not exceed 30,000 gal/yr of distillate fuel with a maximum sulfur content of 0.5% by weight, based on a calendar year total basis. [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 Omnia K-76 boiler. [06 096 CMR 115, BPT]
3. Beginning July 1, 2018, Lane shall fire distillate fuel with a maximum sulfur content not to exceed 0.0015% by weight (15 ppm) in the Omnia K-76 boiler except that any existing distillate fuel purchased (or otherwise obtained) by the facility prior to July 1, 2018 may be used until depleted. [06-096 CMR 115, BPT]
4. 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 total basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

| Emission Unit | Pollutant | lb/MMBtu | Origin and Authority |
|---|---|---|---|
| Omnia K-76 | PM | 0.08 | 06-096 CMR 115, BPT |

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

| Emission Unit | PM (lb/hr) | $PM_{10}$ (lb/hr) | $SO_2$ (lb/hr) | $NO_x$ (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---|---|---|---|---|---|---|
| Omnia K-76 | 0.26 | 0.26 | 1.61 | 0.46 | 0.11 | 0.01 |

D. Visible emissions from Omnia K-76 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 3-hour period. [06-096 CMR 101]

E. Boiler MACT (40 CFR Part 63, Subpart JJJJJJ) Requirements for Omnia K-76 [incorporated under 06-096 CMR 115, BPT]

1. The facility shall implement a boiler tune-up program. [40 CFR Part 63.11223]

   a. Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

| Boiler Category | Tune-Up Frequency |
|---|---|
| With a heat input capacity of <5MMBtu/hr | Every 5 years |

   [40 CFR Part 63.11223(a) and Table 2]

   b. The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
   (1) As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hr, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR Part 63.11223(b)(1)]
   (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR Part 63.11223(b)(2)]
   (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hr, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR Part 63.11223(b)(3)]
   (4) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 63.11223(b)(4)]
   (5) Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR Part 63.11223(b)(5)]
   (6) If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 CFR Part 63.11223(b)(7)]

c. Tune-Up Report: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
   (1) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
   (2) A description of any corrective actions taken as part of the tune-up of the boiler; and
   (3) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 CFR §63.11223(b)(6)]

d. After conducting the initial boiler tune-up, a Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(b)]

2. Compliance Report

A compliance report shall be prepared by March 1st every five years which covers the previous five calendar years. The report shall be maintained by the source and submitted to the Department and to the EPA upon request. The report must include the items contained in §63.11225(b)(1) and (2), including the following: [40 CFR §63.11225(b)]

a. Company name and address;
b. A statement of whether the source has complied with all the relevant requirements of this Subpart;
c. A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
d. The following certifications, as applicable:
   (1) "This facility complies with the requirements in 40 CFR §63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
   (2) "No secondary materials that are solid waste were combusted in any affected unit."
   (3) "This facility complies with the requirement in 40 CFR §§63.11214(d) to conduct a tune-up of each applicable boiler according to 40 CFR §63.11223(b)."

3. Records shall be maintained consistent with the requirements of 40 CFR Part 63, Subpart JJJJJJ including the following [40 CFR Part 63.11225(c)]:
   a. Copies of notifications and reports with supporting compliance documentation;

b. Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
c. Records of the occurrence and duration of each malfunction of each applicable boiler; and
d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. [63.1125(a)(4)(vi)]

(21) **Heatec HCS-175 Hot Oil Heater**

A. Fuel Use

1. The Heatec HCS-175 Hot Oil Heater is licensed to fire distillate fuel with a maximum sulfur content of 0.5% by weight, propane, and natural gas.
2. Total fuel use for the Heatec HCS-175 hot oil heater shall not exceed a maximum yearly heat input capacity of 4,200 MMBtu based on a calendar year total (approximately 30,000 gal/yr of distillate fuel). Fuel use shall be converted to MMBtu on a monthly basis using heating values of 0.14 MMBtu/gal for distillate fuel and specification waste oil, 0.0905 MMBtu/gal for propane, and 0.00103 MMBtu/scf for natural gas. [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 Heatec HCS-175 Hot Oil Heater. [06-096 CMR 115, BPT]
4. Beginning July 1, 2018, the facility shall fire distillate fuel with a maximum sulfur content not to exceed 0.0015% by weight (15 ppm) in the Heatec HCS-175 Hot Oil Heater except that any existing distillate fuel purchased (or otherwise obtained) by the facility prior to July 1, 2018 may be used until depleted. [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 total basis. [06-096 CMR 115, BPT]

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

| Emission Unit | PM (lb/hr) | $PM_{10}$ (lb/hr) | $SO_2$ (lb/hr) | $NO_x$ (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---|---|---|---|---|---|---|
| Heatec HCS-175 (distillate fuel) | 0.16 | 0.16 | 1.01 | 0.29 | 0.07 | 0.01 |
| Heatec HCS-175 (natural gas/propane) | 0.10 | 0.10 | 0.01 | 0.19 | 0.16 | 0.01 |

C. Visible Emissions

1. When Heatec HCS-175 fires distillate fuel visible emissions shall not exceed 20% opacity on a 6-minute block average, except for no more than one (1) six (6) minute block average in a 3-hour period. [06-096 CMR 101]
2. When Heatec HCS-175 fires natural gas or propane visible emissions shall not exceed 10% opacity on a 6-minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period. [06-096 CMR 101]

(22) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 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]

(23) **General Process Sources**

Visible emissions from any general process (including conveyor belts, transfer points, etc.) associated with an NSPS rock crusher shall not exceed an opacity of 7% based on the average of no less than five (5) six (6) minute block averages. [40 CFR Part 60, Subpart OOO]

Visible emissions from any general process (non-NSPS crusher conveyor belts, bucket elevators, bagging operations, truck loading operations, etc.) shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

(24) **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.

(25) 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]

(26) 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 26 DAY OF October , 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

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

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:

Filed
OCT 26 2015
State of Maine
Board of Environmental Protection

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