

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

DEPARTMENT ORDER

Emery Lee and Sons Incorporated Penobscot County East Millinocket, Maine A-169-71-O-A

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

FINDINGS OF FACT

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (the Department) finds the following facts:

I. REGISTRATION

A. Introduction

Emery Lee and Sons Incorporated (Lee) was issued Air Emission License A-169-71-N-N/A on November 22, 2023, for the operation of emission sources associated with their concrete batch plant and portable crushed stone and gravel facility.

The equipment addressed in this license amendment is located at 157 Main Road in East Millinocket, Maine.

Lee has requested an amendment to their license in order to add a portable asphalt plant and associated engine. The visible emission standards for all equipment will be updated to conform to the latest standards as found in 06-096 C.M.R. ch. 101.

B. Emission Equipment

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

Asphalt Plant

| Equipment | Process Rate (tons/hour) | Design Capacity (MMBtu/hr) | Fuel Type | Control Device(s) | Stack ID | Date of Manuf. |
|---------------|-----------------------------|-------------------------------|--|----------------------|-------------|-------------------|
| Asphalt Plant | 250 | 117 | Distillate Fuel, Propane, Specification Waste Oil | Baghouse | 3 | 1987 |

Engines

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| Unit ID | Max. Capacity (MMBtu/hr) | Max. Firing Rate (gal/hr) | Fuel Type | Date of Manuf. |
|--------------|-----------------------------|------------------------------|-----------------|-------------------|
| Generator #5 | 7.7 | 54.9 | Distillate Fuel | 1990 |

C. Definitions

Distillate Fuel means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) 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.

<u>Portable or Non-Road Engine</u> means an internal combustion engine which is 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. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. <u>A location is any single site</u> at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

An engine is <u>not</u> a non-road (portable) engine if it remains or will remain at a location for more than 12 consecutive months or for a shorter period of time if sited at a seasonal source. A seasonal source is a source that remains in a single location for two years or more and which operates for fewer than 12 months in a calendar year. If an engine operates at a seasonal source for one entire season, the engine does not meet the criteria of a non-road (portable) engine and is subject to applicable stationary engine requirements.

<u>Records</u> or <u>Logs</u> mean either hardcopy or electronic records.

<u>Specification Waste Oil</u> means a petroleum-based oil which, through use or handling, has become unsuitable for its original purpose due to the presence of impurities or loss of original properties, and meets all of the following requirements:

- It has sufficient liquid content to be free flowing;
- It meets all of the constituent and property standards as specified in *Waste Oil Management Rules*, 06-096 C.M.R. ch. 860;
- · It does not otherwise exhibit hazardous waste characteristics; and
- It has not been mixed with a hazardous waste.

D. Application Classification

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

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The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the "Significant Emissions" levels as defined in the Department's *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. 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 | 0.6 | 4.0 | 3.4 | 100 |
| PM_{10} | 0.6 | 4.0 | 3.4 | 100 |
| PM _{2.5} | 0.6 | 4.0 | 3.4 | 100 |
| SO_2 | 0.1 | 8.8 | 8.7 | 100 |
| NO _x | 20.3 | 28.6 | 8.3 | 100 |
| CO | 4.4 | 23.9 | 19.5 | 100 |
| VOC | 1.7 | 6.5 | 4.8 | 100 |

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

E. <u>Facility Classification</u>

With the annual fuel limit on the generators and the production limit on the Asphalt Plant, the facility is licensed as follows:

- As a synthetic minor source of air emissions for criteria pollutants, because Lee is subject to license restrictions that keep facility emissions below major source thresholds for NO_x and CO; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

II. BEST PRACTICAL TREATMENT

A. Introduction

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

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

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B. Asphalt Plant

Lee will operate a portable asphalt drum mix plant (Asphalt Plant) with a maximum hourly throughput of 250 ton/hr of asphalt and a 170 MMBtu/hr burner which can fire distillate fuel, propane, or specification waste oil.

Emission factors for asphalt plants are available based on tons of asphalt produced, and there is no linear relationship between plant output and burner firing rate. Therefore, to ensure annual emissions are limited to less than major source thresholds, asphalt throughput is limited instead of fuel consumption. Accordingly, the annual throughput of the Asphalt Plant shall not exceed 300,000 tons of asphalt per year on a 12-month rolling total basis.

1. BACT Findings

The BACT emission limits for the Asphalt Plant were based on the following:

Distillate Fuel

| PM/PM10/PM2.5 | _ | 0.03 gr/dscf and the use of a baghouse pursuant to 06-096 C.M.R. ch. 115, BACT |
|-----------------|---|--|
| SO_2 | _ | 1.1 x 10 ⁻² lb/ton based on AP-42 Table 11.1-7 dated 3/04 |
| NO _x | _ | 5.5 x 10 ⁻² lb/ton based on AP-42 Table 11.1-7 dated 3/04 |
| CO | _ | 0.13 lb/ton based on AP-42 Table 11.1-7 dated 3/04 |
| VOC | _ | 3.2×10^{-2} lb/ton based on AP-42 Table 11.1-8 dated 3/04 |
| Visible | _ | 06-096 C.M.R. ch. 101 |
| Emissions | | |

Propane

| PM/PM10/PM2.5 | _ | 0.03 gr/dscf and the use of a baghouse pursuant to |
|-----------------|---|--|
| | | 06-096 C.M.R. ch. 115, BACT |
| SO_2 | _ | 3.4 x 10 ⁻³ lb/ton based on AP-42 Table 11.1-7 dated 3/04 |
| NO _x | _ | 2.6 x 10 ⁻² lb/ton based on AP-42 Table 11.1-7 dated 3/04 |
| CO | _ | 0.13 lb/ton based on AP-42 Table 11.1-7 dated 3/04 |
| VOC | _ | 3.4×10^{-2} lb/ton based on AP-42 Table 11.1-8 dated 3/04 |
| Visible | _ | 06-096 C.M.R. ch. 101 |
| Emissions | | |

Specification Waste Oil

| PM/PM10/PM2.5 | — | 0.03 gr/dscf and the use of a baghouse pursuant to |
|-----------------|---|--|
| | | 06-096 C.M.R. ch. 115, BACT |
| SO_2 | _ | 5.8 x 10 ⁻² lb/ton based on AP-42 Table 11.1-7 dated 3/04 |
| NO _x | _ | $5.5 \ge 10^{-2}$ lb/ton based on AP-42 Table 11.1-7 dated 3/04 |
| CO | — | 0.13 lb/ton based on AP-42 Table 11.1-7 dated 3/04 |
| VOC | — | 3.2×10^{-2} lb/ton based on AP-42 Table 11.1-8 dated 3/04 |
| Visible | — | 06-096 C.M.R. ch. 101 |
| Emissions | | |

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The BACT emission limits for the Asphalt Plant are the following:

| | | PM | PM ₁₀ | PM _{2.5} | SO ₂ | NO _x | СО | VOC |
|---------|----------------------------|---------|-------------------------|-------------------|-----------------|-----------------|---------|---------|
| Unit | Fuel | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) |
| | Distillate Fuel | 5.66 | 5.66 | 5.66 | 2.75 | 13.75 | 32.50 | 8.00 |
| Asphalt | Propane | 5.66 | 5.66 | 5.66 | 0.85 | 6.50 | 32.50 | 8.50 |
| Plant | Specification Waste Oil | 5.66 | 5.66 | 5.66 | 14.50 | 13.75 | 32.50 | 8.00 |

Visible emissions from the asphalt plant baghouse shall not exceed 20% opacity on a six-minute block average basis. This is consistent with the PM limit contained in *Standards of Performance for Hot Mix Asphalt Facilities*, 40 C.F.R. Part 60, Subpart I of 20% opacity.

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

The Asphalt Plant is licensed to fire distillate fuel. With limited exceptions, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm) pursuant to 38 M.R.S. § 603-A(2)(A)(3). Therefore, the distillate fuel purchased or otherwise obtained for use in the Asphalt Plant shall not exceed 0.0015% by weight (15 ppm).

2. New Source Performance Standards

The Asphalt Plant was manufactured in 1987 and is therefore 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 facilities constructed or modified after June 11, 1973.

a. Notification
 Lee shall submit notification to EPA and the Department of the date of initial startup. [40 C.F.R. § 60.7(a)(3)]

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- b. Standards
 - (1) Particulate Matter (PM)

The Asphalt Plant shall not exceed an emission limit of 0.04 gr/dscf. [40 C.F.R. \$ 60.92(a)(1)]

The Department has determined that the proposed BACT particulate matter emission limit of 0.03 gr/dscf is more stringent than the applicable limit in 40 C.F.R. Part 60, Subpart I. Therefore, the particulate matter limit for the Asphalt Plant has been streamlined to the more stringent BACT limit, and only this more stringent limit shall be included in the Order of this air emission license.

(2) Opacity

Visible emissions from the Asphalt Plant shall not exceed 20% opacity on a 6-minute block average basis. [40 C.F.R. §§ 60.92(a)(2) and 60.93(b)(2)] This standard applies at all times. [06-096 C.M.R. ch.115, BPT]

c. Initial Compliance Requirements

Lee shall perform the following within 60 days after achieving the maximum production rate at which the Asphalt Plant will be operated but not later than 180 days after the initial startup:

- (1) Lee shall conduct an initial performance test for PM using 40 C.F.R. Part 60, Appendix A, Method 5. [40 C.F.R. § 60.93(b)(1)]
- (2) Lee shall conduct an initial performance test for opacity using 40 C.F.R. Part 60, Appendix A, Method 9. [40 C.F.R. § 60.93(b)(2)]
- 3. Control Equipment

Emissions from the Asphalt Plant shall be controlled by a baghouse.

4. Periodic Monitoring

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

a. Continuous PM detector: When the detector signals excessive PM concentrations in the exhaust stream, Lee shall take corrective action within 24 hours, or immediately if visible emissions exceed 20% opacity.

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b. Personnel available on-site with a current EPA 40 C.F.R. Part 60, Appendix A, Method 9 visible emissions certification. When visible emissions exceed 20% opacity, the hot mix asphalt plant is operating with insufficient control, and corrective action shall be taken immediately.

Lee shall keep records of baghouse failures, baghouse maintenance, and baghouse inspections.

To document maintenance of the baghouse, Lee shall keep records of the date and location of all bag failures, the date and a description of all routine maintenance, and the date and results of all inspections. These records shall be kept on-site at the asphalt plant location. Records shall also be maintained recording the quantity and analyzed test results of all specification waste oil fired in the unit.

- 5. Contaminated Soils
 - a. Soils Contaminated with Gasoline and Distillate Fuel

Lee may process up to 10,000 cubic yards per calendar year of soil contaminated by gasoline or distillate fuel without prior approval from the Department's Bureau of Air Quality.

This limit may be exceeded with prior written authorization from the Department's Bureau of Air Quality. Requests will be evaluated on a case-by-case basis, taking into account the nature and amount of the contaminated soil to be processed, the location where the processing will occur, and the potential for fugitive emissions.

b. General Requirements for Processing of Contaminated Soils

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

Lee shall notify the Department (regional air compliance inspector) at least 24 hours prior to processing contaminated soil and specify the contaminating material and quantity, origin of the soil and contaminating material, and the disposition of the contaminated soil. This authorization to process contaminated soil does not absolve the facility of responsibility to comply with all other air emission license conditions and any other applicable state rules or statutes.

When processing contaminated soils, Lee 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, Lee shall maintain records on an hourly basis of processing temperature, asphalt feed rates, and dryer throughput.

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Any approval from the Department's Bureau of Air Quality to process contaminated soil does not supersede requirements from other Department bureaus. Similarly, approvals to process contaminated soil granted by another Department bureau does not supersede the requirements of this air emission license.

C. <u>Generator #5</u>

Generator #5 is a portable engine used to power the Asphalt Plant. Generator #5 has a maximum capacity of 7.7 MMBtu/hr (750 kw) firing distillate fuel. The generator was manufactured in 1990 and is a Cummins 750DFJA. The fuel fired in Generator #5 shall be included in the facilities existing engine fuel limit of 66,000 gallons per year on a 12-month rolling total basis. The distillate fuel fired in Generator #5 shall have a sulfur content not to exceed 15 ppm (0.0015% sulfur by weight). This fuel limit shall apply regardless of where the unit is operated.

1. BACT Findings

The BACT emission limits for Generator #5 were based on the following:

| PM/PM10/PM2.5 | _ | 0.12 b/MMBtu from 06-096 C.M.R. ch. 103 |
|-----------------|---|---|
| SO_2 | _ | Combustion of distillate fuel with a maximum sulfur content |
| | | not to exceed 15 ppm (0.0015% sulfur by weight) |
| NO _x | _ | 3.2 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96 |
| CO | _ | 0.85 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96 |
| VOC | _ | 0.09 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96 |
| Visible | _ | 06-096 C.M.R. ch. 101 |
| Emissions | | |

The BACT emission limits for Generator #5 are the following:

| Unit | Pollutant | lb/MMBtu |
|--------------|-----------|----------|
| Generator #5 | PM | 0.12 |

| Unit | PM | PM ₁₀ | PM _{2.5} | SO ₂ | NO _x | CO | VOC |
|--------------|---------|------------------|-------------------|-----------------|-----------------|---------|---------|
| | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) |
| Generator #5 | 0.92 | 0.92 | 0.92 | 0.01 | 24.42 | 6.49 | 0.69 |

Visible emissions from Generator #5 shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time Lee shall either

meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

- a. The duration of the startup shall not exceed 30 minutes per event;
- b. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
- c. Lee shall keep records of the date, time, and duration of each startup.

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Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

2. Chapter 169

Generator #5 is a portable unit and is therefore exempt from *Stationary Generators*, 06-096 C.M.R. ch. 169 pursuant to section 1.

3. New Source Performance Standards

Generator #5 is <u>not</u> subject to *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, 40 C.F.R. Part 60, Subpart IIII as it was manufactured before the applicability date of this rule.

4. National Emission Standards for Hazardous Air Pollutants

Generator #5 is <u>not</u> subject to *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ.

The definition in 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." The regulation further states at 40 C.F.R. § 1068.30 that an engine is <u>not</u> a non-road engine if it remains or will remain at a location for more than 12 consecutive months or for a shorter period of time if sited at a seasonal source. A seasonal source is a source that remains in a single location for two years or more and which operates for fewer than 12 months in a calendar year. If an engine operates at a seasonal source for one entire season, the engine does not meet the criteria of a non-road engine and is subject to applicable stationary engine requirements. [40 C.F.R. § 63.6585]

Generator #5 is considered a non-road engine, as opposed to a stationary engine, since Generator #5 is portable and will be moved to various sites with the asphalt plant.

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D. Existing Equipment Visible Emission Standards

In 2023, the Department completed rulemaking on revisions to *Visible Emissions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 101. The revised rule went into effect on January 1, 2024. With this update, the requirements for the existing equipment shall be updated to the latest standard.

- 1. Visible emissions from Generator #3 and CAT Generator shall each not exceed 20% opacity on a six-minute block average basis.
- 2. Visible emissions from Generator #4 shall not exceed 20% opacity on a six-minute block average basis except for periods of startup, during which time Lee shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.
 - a. The duration of the startup shall not exceed 30 minutes per event;
 - b. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
 - c. Lee shall keep records of the date, time, and duration of each startup.

Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

3. General Process Emissions

Visible emissions from any general process that is not part of a nonmetallic mineral processing plant shall not exceed 20% opacity on a six-minute block average basis.

4. Fugitive Emissions Including Stock Piles and Roadways

Lee shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

Lee shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

E. Performance Test Protocol

For any performance testing required by this license, Lee shall submit to the Department for approval a performance test protocol, as outlined in the Department's Performance Testing Guidance, at least 30 days prior to the scheduled date of the performance test. [06-096 C.M.R. ch. 115, BPT]

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Note: Although some federal standards, such as 40 C.F.R. Part 60, Subpart OOO, allow for a shorter pretest notification period, the Department requires pretest notification a minimum of 30 days prior to the scheduled date of the performance test unless a variance of this requirement is preapproved by the Department.

The Department's Performance Testing Guidance is available online at: https://www.maine.gov/dep/air/emissions/testing.html

F. Emission Statements

With the addition of the Asphalt Plant, Lee is now subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. Lee shall maintain the following records in order to comply with this rule:

- 1. The tons of asphalt processed in the Asphalt Plant on a monthly basis;
- 2. The amount of distillate fuel fired in Generators #3, #4, #5, and CAT Generator (each) on a monthly basis; and
- 3. The sulfur content of the distillate fuel fired in Generators #3, #4, #5, and CAT Generator.

Every third year, or as requested by the Department, Lee shall report to the Department emissions of hazardous air pollutants as required pursuant to 06-096 C.M.R. ch. 137, § (3)(C). The next report is due no later than May 15, 2024, for emissions occurring in calendar year 2023. The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. Lee shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

G. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are

not included except when required by state or federal regulations. Maximum potential emissions were calculated based on the following assumptions:

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- Processing 300,000 ton/year of asphalt; and
- Firing 66,000 gal/year of distillate fuel in the generators.

This information does not represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

Total Licensed Annual Emissions for the Facility Tons/year

| (used to calculate the annual license fee) | | | | | | | |
|--|-----|-------------------------|-------------------|-----------------|-----------------|------|-----|
| | PM | PM ₁₀ | PM _{2.5} | SO ₂ | NO _x | CO | VOC |
| Generators | 0.6 | 0.6 | 0.6 | 0.1 | 20.3 | 4.4 | 1.7 |
| Asphalt Plant | 3.4 | 3.4 | 3.4 | 8.7 | 8.3 | 19.5 | 4.8 |
| Total TPY | 4.0 | 4.0 | 4.0 | 8.8 | 28.6 | 23.9 | 6.5 |

| Pollutant | Tons/year |
|------------|-----------|
| Single HAP | 9.9 |
| Total HAP | 24.9 |

III.AMBIENT AIR QUALITY ANALYSIS

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

| Pollutant | Tons/Year |
|-------------------|-----------|
| PM_{10} | 25 |
| PM _{2.5} | 15 |
| SO_2 | 50 |
| NO _x | 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 amendment.

This determination is based on information provided by the applicant regarding the expected construction and operation of the proposed emission units. If the Department determines that

any parameter (e.g., stack size, configuration, flow rate, emission rates, nearby structures, etc.) deviates from what was included in the application, the Department may require Lee to submit additional information and may require an ambient air quality impact analysis at that time.

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ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Amendment A-169-71-O-A, subject to the conditions found in Air Emission License A-169-71-N-N/A and the following conditions.

<u>Severability</u>. The invalidity or unenforceability of any provision of this License Amendment or part thereof shall not affect the remainder of the provision or any other provisions. This License Amendment shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

SPECIFIC CONDITIONS

The following shall replace Conditions (19), (20), and (21) of Air Emission License A-169-71-N-N/A:

(19) **Engines**

- A. Fuel Use
 - Generators #3, #4, #5, and CAT Generator are licensed to fire distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight). Compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of fuel in the tank on-site. [06-096 C.M.R. ch. 115, BPT for Generators #3, #4, and CAT Generator; BACT for Generator #5]
 - 2. Total fuel use for all engines combined shall not exceed 66,000 gal/yr of distillate fuel, regardless of where the units are operated. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel delivered. Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT for Generators #3, #4, and CAT Generator; BACT for Generator #5]

B. Lee shall maintain records which demonstrate that Generators #3, #4, #5, and CAT Generator are relocated and operated on a basis which maintains their classification of non-road (portable) engines. [06-096 C.M.R. ch. 115, BPT]

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C. Emissions shall not exceed the following:

| Unit | Pollutant lb/MMBtu | | Origin and Authority |
|--------------|--------------------|------|---------------------------------------|
| Generator #4 | PM | 0.12 | 06-096 C.M.R. ch. 103, § (2)(B)(1)(a) |
| Generator #5 | PM | 0.12 | 06-096 C.M.R. ch. 103, § (2)(B)(1)(a) |

D. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT for Generators #3, #4, and CAT Generator; BACT for Generator #5]:

| Unit | PM (lb/hr) | PM ₁₀ (lb/hr) | PM _{2.5} (lb/hr) | SO ₂ (lb/hr) | NO _x (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---------------|---------------|-----------------------------|------------------------------|----------------------------|----------------------------|---------------|----------------|
| Generator #3 | 0.20 | 0.20 | 0.20 | 0.01 | 7.06 | 1.52 | 0.58 |
| Generator #4 | 0.52 | 0.52 | 0.52 | 0.01 | 18.97 | 4.09 | 1.55 |
| Generator #5 | 0.92 | 0.92 | 0.92 | 0.01 | 24.42 | 6.49 | 0.69 |
| CAT Generator | 0.33 | 0.33 | 0.33 | 0.01 | 11.91 | 2.57 | 0.98 |

E. Visible Emissions

Visible emissions from Generator #3 and CAT Generator shall each not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(4)]

Visible emissions from Generators #4, and #5 shall each not exceed 20% opacity on a six-minute block average basis except for periods of startup, during which time Lee shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

- 1. The duration of the startup shall not exceed 30 minutes per event;
- 2. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
- 3. Lee shall keep records of the date, time, and duration of each startup.

Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day. $[06-096 \text{ C.M.R. ch. } 101, \S 4(A)(4)]$

(20) General Process Sources

Visible emissions from any general process that is not part of a nonmetallic mineral processing plant shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

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(21) Fugitive Emissions Including Stockpiles and Roadways

Lee shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, 4(C) for a list of potential reasonable precautions.

Lee shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22. [06-096 C.M.R. ch. 101, § 4(C)]

The following are new conditions of Air Emission License A169-71-N-N/A.

(25) Asphalt Plant

A. Fuel Use

- 1. The Asphalt Plant is licensed to fire distillate fuel, specification waste oil, and propane. [06-096 C.M.R. ch. 115, BACT]
- 2. The facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BACT]
- B. The annual throughput of the Asphalt Plant shall not exceed 300,000 tons of asphalt per year on a 12-month rolling total basis. Records of asphalt production shall be kept on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT]
- C. Lee shall maintain records which demonstrate that the Asphalt Plant is relocated and operated on a basis which maintains its classification of portable. [06-096 C.M.R. ch. 115, BPT]
- D. Emissions from the Asphalt Plant shall vent to a baghouse, and all components of the Asphalt Plant shall be maintained so as to prevent PM leaks. [06-096 C.M.R. ch. 115, BACT]

E. The performance of the baghouse shall be monitored by either one of the following at all times the hot mix asphalt plant is operating:
 [06-096 C.M.R. ch. 115, BACT]

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- 1. Continuous PM detector: When the detector signals excessive PM concentrations in the exhaust stream, Lee shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
- 2. Personnel available on-site with a current EPA Method 9 visible emissions certification: When visible emissions exceed 20% opacity, the Asphalt Plant is operating with insufficient control, and corrective action shall be taken immediately.
- F. To document maintenance of the baghouse, Lee shall keep records of the date and location of all bag failures, the date and a description of all routine maintenance, and the date and results of all inspections. These records shall be kept on-site at the Asphalt Plant location. [06-096 C.M.R. ch. 115, BPT]
- G. Emissions from the asphalt plant baghouse shall not exceed the following [06-096 C.M.R. ch. 115, BACT]:

| Pollutant | grs/dscf |
|-----------|----------|
| PM | 0.03 |

| | | PM | PM ₁₀ | PM _{2.5} | SO ₂ | NO _x | СО | VOC |
|------------------|----------------------------|---------|-------------------------|-------------------|-----------------|-----------------|---------|---------|
| Unit | Fuel | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) |
| Asphalt Plant | Distillate Fuel | 5.66 | 5.66 | 5.66 | 2.75 | 13.75 | 32.50 | 8.00 |
| | Propane | 5.66 | 5.66 | 5.66 | 0.85 | 6.50 | 32.50 | 8.50 |
| | Specification Waste Oil | 5.66 | 5.66 | 5.66 | 14.50 | 13.75 | 32.50 | 8.00 |

- H. General process emissions from the hot mix asphalt plant shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]
- I. Lee shall comply with all requirements of 40 C.F.R. Part 60, Subpart I applicable to the Asphalt Plant including, but not limited to, the following:
 - 1. Notification

Lee shall submit notification to EPA and the Department of the date of initial startup. [40 C.F.R. § 60.7(a)(3)]

2. Visible emissions from the Asphalt Plant shall not exceed 20% opacity on a 6-minute block average basis. [40 C.F.R. §§ 60.92(a)(2) and 60.93(b)(2)] This standard applies at all times. [06-096 C.M.R. ch. 101, § 4(B)(1)]

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- 3. Initial Compliance Requirements Lee shall perform the following within 60 days after achieving the maximum production rate at which the Asphalt Plant will be operated but not later than 180 days after the initial startup:
 - a. Lee shall conduct an initial performance test for PM using 40 C.F.R. Part 60, Appendix A, Method 5. [40 C.F.R. § 60.93(b)(1)]
 - b. Lee shall conduct an initial performance test for opacity using 40 C.F.R. Part 60, Appendix A, Method 9. [40 C.F.R. § 60.93(b)(2)]
- J. Contaminated Soils
 - 1. Soils Contaminated with Gasoline and Distillate Fuel

Lee may process up to 10,000 cubic yards per calendar year of soil contaminated by gasoline or distillate fuel without prior approval from the Department's Bureau of Air Quality.

This limit may be exceeded with prior written authorization from the Department's Bureau of Air Quality. Requests will be evaluated on a case-by-case basis, taking into account the nature and amount of the contaminated soil to be processed, the location where the processing will occur, and the potential for fugitive emissions.

- 2. General Requirements for Contaminated Soils
 - a. Lee shall not process soils which are classified as hazardous waste or which have unknown contaminants.
 - b. Lee shall notify the Department (regional air compliance inspector) at least 24 hours prior to processing the contaminated soil and specify the contaminating material and quantity, origin of the soil and contaminating material, and the disposition of the contaminated soil. This authorization to process contaminated soil does not absolve the facility of responsibility to comply with all other air emission license conditions and any other applicable state rules or statutes.
 - c. When processing contaminated soils, Lee 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, Lee shall maintain records on an hourly basis of processing temperature, asphalt feed rates, and dryer throughput.

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

(26) Annual Emission Statements

- A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, Lee shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.
- B. Lee shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:
 - 1. The tons of asphalt processed in the Asphalt Plant on a monthly basis;

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- 2. The amount of distillate fuel fired in Generators #3, #4, #5, and CAT Generator (each) on a monthly basis; and
- 3. The sulfur content of the distillate fuel fired in Generators #3, #4, #5, and CAT Generator.

[06-096 C.M.R. ch. 137]

C. Every third year, or as requested by the Department, Lee shall report to the Department emissions of hazardous air pollutants as required pursuant to 06-096 C.M.R. ch. 137, § (3)(C). The next report is due no later than May 15, 2024, for emissions occurring in calendar year 2023. Lee shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3).
[38 M.R.S. § 353-A(1-A)]

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

(27) Performance Test Protocol

For any performance testing required by this license, Lee shall submit to the Department for approval a performance test protocol, as outlined in the Department's Performance Testing Guidance, at least 30 days prior to the scheduled date of the performance test. [06-096 C.M.R. ch. 115, BPT]

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done and dated in Augusta, maine this 13^{th} day of MAY, 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION BY: for MELANIE LOYZIM, COMMISSIONER

The term of this license amendment shall be ten (10) years from the issuance of Air Emission License A-169-71-N-N/A (issued 11/22/2023).

[Note: If a renewal application, determined as complete 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 license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 3/25/24Date of application acceptance: 3/25/24

Date filed with the Board of Environmental Protection:

This Order prepared by Chris Ham, Bureau of Air Quality.

FILED

MAY 13, 2024

State of Maine Board of Environmental Protection