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

DEPARTMENT ORDER

Pike Industries, Inc. **Kennebec County** **Augusta, Maine** **A-247-71-N-A (SM)**	**Departmental** **Findings of Fact and Order** **Air Emission License** **Amendment #1**

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

Pike Industries, Inc. (Pike) was issued Air Emission License A-247-71-M-R/A on November 19, 2015, for the operation of emission sources associated with their hot mix asphalt plant located at Sanford Road, Augusta, Maine.

Pike has requested an amendment to their license in order to add a portable generator to their license and reduce the asphalt throughput limit for Asphalt Batch Plant P712 from 300,000 tons/year to 100,000 tons/year.

The main office is located at 95 Warren Avenue, Westbrook, Maine.

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, % sulfur	Firing Rate	Control Device	Date of Manuf.
Asphalt Batch Plant P712	250	110	Distillate fuel, 0.5% Residual fuel, 0.5% Spec. waste oil, 0.5%	790 gal/hr	Baghouse	1966

Generator Unit

Unit ID	Max. Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Fuel Type, % sulfur	Date of Manuf.
Generator #1	3.29	24.0	Distillate fuel, 0.0015%	1996

C. Definitions

Distillate Fuel. For the purposes of this license, *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.

D. Application Classification

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

The modification of a minor source is considered a major or minor modification based on whether or not expected emissions increases exceed the "Significant Emissions" levels as defined in the Department's *Definitions Regulation*, 06-096 C.M.R. ch. 100. The emissions 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 Emissions Levels
PM	4.2	2.3	-1.9	100
PM_{10}	4.2	2.3	-1.9	100
SO_2	16.9	8.2	-8.7	100
NO_x	20.6	23.7	+3.1	100
CO	60.2	23.5	-36.7	100
VOC	5.5	3.1	-2.4	50
CO_2e	<100,000	<100,000	-	100,000

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

II. BEST PRACTICAL TREATMENT

A. Introduction

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

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

B. Asphalt Batch Plant P712

Pike has requested to reduce the asphalt throughput limit for Asphalt Batch Plant P712 from 300,000 tons/year of asphalt to 100,000 tons/year of asphalt in order to reduce the environmental impact of adding Generator #1 to their license. The facility's licensed annual emissions have been revised to reflect this change as part of this license amendment.

C. Generator #1

Generator #1 is a portable engine used to power a portable screening plant. Generator #1 has a maximum capacity of 3.29 MMBtu/hr (354 kW), firing distillate fuel. Generator #1 was manufactured in 1996. The fuel fired in Generator #1 shall be limited to 50,000 gallons/year on a 12-month rolling total basis of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight).

1. BACT Findings

The BACT emission limits for Generator #1 were based on the following:

PM, PM_{10}	- 0.12 lb/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	- 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	- 0.36 lb/MMBtu from AP-42, Table 3.3-1, dated 10/96
Visible Emissions	- 06-096 C.M.R. ch. 115, BACT

The BACT emission limits for Generator #1 are the following:

Unit	Pollutant	lb/MMBtu
Generator #1	PM	0.12

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.39	0.39	0.01	14.51	3.13	1.18

Visible emissions from Generator #1 shall not exceed 20% opacity on a six-minute block average basis.

2. New Source Performance Standards

Generator #1 was manufactured prior to April 1, 2006, and is considered a non-road engine, as opposed to a stationary engine, since it is portable and will be moved to various sites with the screening plant. Therefore, Generator #1 is not subject to *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines,* 40 C.F.R. Part 60, Subpart IIII. [40 C.F.R. § 60.4200]

3. National Emission Standards for Hazardous Air Pollutants

Generator #1 is considered a non-road engine, as opposed to a stationary engine, since Generator #1 is portable and will be moved to various sites with a portable screen. Therefore, Generator #1 is not 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." 40 C.F.R. § 1068.30 further states that an engine is not a non-road engine if it remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. An engine located at a seasonal source (a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year) is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. [40 C.F.R. § 63.6585]

D. Annual Emissions

Pike shall be restricted to the following annual emissions, based on a calendar year total. The tons per year limits were calculated based on an asphalt production limit of 100,000 tons/year for Asphalt Batch Plant P712, 8,760 hours/year of operation for Heater #1, and a fuel limit of 50,000 gallons/year for Generator #1:

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
Asphalt Batch Plant P712	1.1	1.1	4.4	6.0	20.0	1.8
Heater #1	0.8	0.8	3.7	2.6	0.2	0.1
Generator #1	0.4	0.4	0.1	15.1	3.3	1.2
Total TPY	**2.3**	**2.3**	**8.2**	**23.7**	**23.5**	**3.1**

III. AMBIENT AIR QUALITY ANALYSIS

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

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,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Amendment A-247-71-N-A, subject to the conditions found in Air Emission License A-247-71-M-R/A and the following conditions.

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

SPECIFIC CONDITIONS

The following shall replace Condition (16)(B.) of Air Emission License A-247-71-M-R/A (dated November 19, 2015):

(16) **Asphalt Batch Plant P712**

B. The annual throughput of Asphalt Batch Plant P712 shall not exceed 100,000 tons of asphalt per year on a calendar year total basis. Records of asphalt production shall be kept on a monthly and calendar year total basis. [06-096 C.M.R. ch. 115, BPT]

The following is a new Condition for Air Emission License A-247-71-M-R/A (dated November 19, 2015):

(23) **Generator #1**

A. Fuel Use

1. Generator #1 is licensed to fire distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight). [06-096 C.M.R. ch. 115, BACT]
2. Total fuel use for Generator #1 shall not exceed 50,000 gal/yr of distillate fuel. 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 calendar year total basis. [06-096 C.M.R. ch. 115, BACT]

B. Emissions shall not exceed the following:

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

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

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.39	0.39	0.01	14.51	3.13	1.18

D. Visible emissions from Generator #1 shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]

DONE AND DATED IN AUGUSTA, MAINE THIS 30 DAY OF June , 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Cone for
PAUL MERCER, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-247-71-M-R/A.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 3/30/2017
Date of application acceptance: 4/3/2017

Date filed with the Board of Environmental Protection:

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

Filed
JUN 30 2017
State of Maine
Board of Environmental Protection