



DEPARTMENT ORDER

**Pike Industries, Inc.  
Knox County  
Washington, Maine  
A-239-71-Q-A**

**Departmental  
Findings of Fact and Order  
Air Emission License  
Amendment #4**

**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-239-71-M-T/R on October 24, 2014, for the operation of emission sources associated with their hot mix asphalt plant located at 73 Jefferson Road, Washington, Maine. The license was subsequently amended on October 13, 2015 (A-239-71-N-A), June 9, 2016 (A-239-71-O-M), and June 30, 2017 (A-239-71-P-A).

Pike has requested an amendment to their license in order to add an additional portable generator that will be used to power portable rock crushers currently at the facility. These rock crushers are covered by general permits issued under *General Permit for Nonmetallic Mineral Processing Plants*, 06-096 Code of Maine Rules (C.M.R.) ch. 149, and thus will not be discussed further in this air emission license.

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:

**Engine**

<b><u>Unit</u></b>	<b><u>Max. Capacity (MMBtu/hr)</u></b>	<b><u>Max. Firing Rate (gal/hr)</u></b>	<b><u>Power Output (kW)</u></b>	<b><u>Fuel Type, % sulfur</u></b>	<b><u>Date of Manuf.</u></b>	<b><u>Date of Install.</u></b>
Gen 403	6.1	44.62	831	Distillate fuel, 0.0015%	2002	2018

Pike may operate small stationary engines smaller than 0.5 MMBtu/hr. These engines are considered insignificant activities and are not required to be included in this license. However, they are still subject to applicable State and Federal regulations. More information regarding requirements for small stationary engines is available on the Department's website at the link below.

<http://www.maine.gov/dep/air/publications/docs/SmallRICEGuidance.pdf>

Additionally, Pike may operate portable engines used for maintenance or emergency-only purposes. These engines are considered insignificant activities and are not required to be included in this license. However, they may still be subject to applicable State and Federal regulations.

### 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.

Portable Engine. For the purposes of this license, *portable engine* 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. A location is any single site 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.

### 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.

This amendment will not increase licensed emissions of any pollutant, but will include the installation of new equipment; therefore, this modification is determined to be a minor modification as defined in the Department's *Definitions Regulation*, 06-096 C.M.R. ch. 100 and has been processed as such.

E. Facility Classification

With the annual throughput limit on Asphalt Batch Plant (P818) and the annual fuel limit on Generator #1 and Gen 403, the facility is licensed as follows:

- As a synthetic minor source of air emissions, because the licensed emissions are below the major source thresholds for criteria pollutants; 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.

B. Gen 403

Gen 403 is a portable engine used to power portable rock crushers currently at the facility. Gen 403 has a maximum capacity of 6.1 MMBtu/hr (831 kW) and fires distillate fuel at a maximum rate of 44.62 gal/hr. Gen 403 was manufactured in 2002. The fuel fired in Gen 403 and Generator #1 combined shall be limited to 20,000 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). This fuel limit shall apply regardless of where the units are operated.

1. BACT Findings

The BACT emission limits for Gen 403 were based on the following:

PM, PM <sub>10</sub>	- 0.12 lb/MMBtu from 06-096 C.M.R. ch. 115, BACT
SO <sub>2</sub>	- combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
NO <sub>x</sub>	- 3.2 lb/MMBtu from AP-42, Table 3.4-1, dated 10/96
CO	- 0.85 lb/MMBtu from AP-42, Table 3.4-1, dated 10/96
VOC	- 0.09 lb/MMBtu from AP-42, Table 3.4-1, dated 10/96
Visible Emissions	- 06-096 C.M.R. ch. 115, BACT

The BACT emission limits for Gen 403 are the following:

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Gen 403	0.73	0.73	0.01	19.52	5.19	0.55

Visible emissions from Gen 403 shall not exceed 20% opacity on a six-minute block average basis.

2. New Source Performance Standards

Gen 403 is considered a non-road engine, as opposed to a stationary engine, since Gen 403 is portable and will be moved to various sites with the portable rock crushers currently on site. Additionally, Gen 403 was manufactured prior to April 1, 2006. Therefore, Gen 403 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

Gen 403 is considered a non-road engine, as opposed to a stationary engine, since Gen 403 is portable and will be moved to various sites with the portable rock crushers currently on site. Therefore, Gen 403 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]

C. Annual Emissions

This amendment will not change the facility's licensed annual emissions.

### 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:

<b>Pollutant</b>	<b>Tons/Year</b>
PM <sub>10</sub>	25
SO <sub>2</sub>	50
NO <sub>x</sub>	50
CO	250

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

### ORDER

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

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

The Department hereby grants Air Emission License A-239-71-Q-A, subject to the conditions found in Air Emission License A-239-71-M-T/R, in amendments A-239-71-N-A, A-239-71-O-M, and A-239-71-P-A, and the following condition.

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 Condition shall replace Condition (23) of Air Emission License Amendment A-239-71-P-A (June 30, 2017):

(23) **Generator #1 and Gen 403**

A. Fuel Use

1. Generator #1 and Gen 403 are licensed to fire distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight). [06-096 C.M.R. ch. 115, BACT]
2. Total fuel use for Generator #1 and Gen 403 combined shall not exceed 20,000 gal/yr of distillate fuel on a 12-month rolling total basis, regardless of where the units are operated. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and percent sulfur 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]

B. Emissions shall not exceed the following:

<b>Unit</b>	<b>Pollutant</b>	<b>lb/MMBtu</b>	<b>Origin and Authority</b>
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]:

<b>Unit</b>	<b>PM (lb/hr)</b>	<b>PM<sub>10</sub> (lb/hr)</b>	<b>SO<sub>2</sub> (lb/hr)</b>	<b>NO<sub>x</sub> (lb/hr)</b>	<b>CO (lb/hr)</b>	<b>VOC (lb/hr)</b>
Generator #1	0.43	0.43	0.01	15.70	3.38	1.28
Gen 403	0.73	0.73	0.01	19.52	5.19	0.55

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D. Visible emissions from Generator #1 and Gen 403 shall each 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 10 DAY OF October, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Cane for  
PAUL MERCER, COMMISSIONER

**The term of this amendment shall be concurrent with the term of Air Emission License A-239-71-M-T/R.**

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: September 14, 2018  
Date of application acceptance: September 17, 2018

Date filed with the Board of Environmental Protection:

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

