STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

Pike Industries, Inc.
Cumberland County
Portland, Maine
A-351-71-L-R (SM)

Departmental
Findings of Fact and Order
Air Emission License

After review of the air emission license renewal application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Pike Industries, Inc., located in Portland, Maine has applied to renew their Air Emission License, permitting the operation of their portable hot mix asphalt batch plant, designated P910.

The main office of Pike Industries, Inc. is located at 58 Main Street in Westbrook.

B. Emission Equipment

Pike Industries, Inc. is authorized to operate the following equipment:

Asphalt Batch Plant

Equipment	Process Rate (tons/hr)	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Control Device(s)	Date of Manufacture
Rotary Kiln – P910	240	82.8, firing: #2 and Spec Waste Oil, 0.5%	591	Baghouse	1965

Heating Equipment

Equipment	Maximum Capacity (MMBtu/hr)	Fuel Type	Maximum Firing Rate (gal/hr)
Hot Oil Heater – P910-1	1.85	#2 and Spec Waste Oil, 0.5%	15

C. Application Classification

The application for Pike Industries, Inc. does not include the installation of new or modified equipment, therefore the license is considered to be a renewal of current licensed emissions units only per *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended). With fuel limits placed on the asphalt batch plant and hot oil heater, Pike Industries, Inc. is licensed below the major source thresholds and is therefore considered a synthetic minor.

The emissions addressed in this license have been updated from the previous license to reflect the most recent AP-42 emission factors.

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 06-096 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

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. Asphalt Batch Plant – P910

Pike Industries, Inc. operates a hot mix portable asphalt batch plant, designated P910, for the production of asphalt at their Portland, Maine facility.

P910 is a portable hot mix asphalt plant with a maximum designed heat input capacity of 82.8 MMBtu/hr and has a maximum design process rate of 240 tons of asphalt per hour. The asphalt batch plant rotary kiln can fire ASTM D396 compliant #2 fuel oil and/or specification waste oil with a sulfur content not to exceed 0.5% by weight. Fuel use for the P910 asphalt batch plant, including the P910-1 hot oil heater, shall not exceed 480,000 gallons, on a twelve-month rolling total basis.

P910 was manufactured in 1965 and is therefore not subject to the 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.

BPT emission limits for the P910 asphalt batch plant were based on the following:

PM/PM_{10}	0.03 gr/dscf, 5.7 lb/hr
SO_2	0.5 lb/MMBTU for 0.5%S fuel oil; 41.4 lb/hr
NO_X	0.12 lb/ton from AP-42, Table 11.1-5 (dated 3/04); 28.8 lb/hr
CO	0.40 lb/ton from AP-42, Table 11.1-5 (dated 3/04); 96.0 lb/hr
VOC	0.036 lb/ton from AP-42, Table 11.1-6 (dated 3/04); 8.6 lb/hr
Opacity	06-096 CMR 101, Visible Emission Regulation: visible emissions from the asphalt batch plant baghouse shall not exceed 20% on a six-minute block average basis, except for no more than two six-minute block averages in a continuous three-hour period

The emissions limits for NO_x, CO and VOCs have been updated from the previous license to reflect the most recent AP-42 emission factors.

Pike Industries, Inc. may process up to 10,000 cubic yards per year of soil contaminated by gasoline or #2 fuel oil without prior approval from the Department. This limit may be exceeded with written authorization from the Department. The plant owner or operator shall notify the Department at least 24 hours prior to processing the contaminated soil and specify the contaminating fuel and quantity, origin of the soil and fuel and the disposition of the contaminated soil. Pike Industries, Inc. shall not process soils which are classified as hazardous waste or which have unknown contaminants.

Pike Industries, Inc. may process up to 5,000 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.

Virgin Oil - Definition

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.

When processing contaminated soils, Pike Industries, Inc. 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, Pike Industries, Inc. 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.

Control Equipment

To meet requirements of BPT, the portable asphalt batch plant shall vent to a baghouse.

Periodic Monitoring

The performance of the baghouse shall be constantly monitored by either one of the following at all times the asphalt batch plant is operating:

1. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, Pike Industries, Inc. shall take corrective action within twenty-four hours, or immediately if opacity exceeds 20% based on a six-minute block average basis.

2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the asphalt batch plant is operating with insufficient control and corrective action shall be taken immediately.

Pike Industries, Inc. shall establish a system of maintenance, inspection and repair for the asphalt batch plant baghouse, which shall allow for periodic inspection of the system. Pike Industries, Inc. shall document compliance by means of a maintenance, inspection and repair log in which Pike Industries, Inc. shall record the date of all bag failures and all routine maintenance as well as all inspection dates and findings.

Pike Industries, Inc. shall keep records of fuel use and receipts for the asphalt batch plant which shall be maintained for at least six years and made available to the Department upon request. A log shall also be maintained recording the quantity and analyzed test results of all specification waste oil fired in the dryer.

C. Hot Oil Heater – P910-1

Pike Industries, Inc. utilizes a liquid asphalt hot oil heater, designated P910-1, to maintain the heat in the asphalt storage silo. P910-1 has a maximum design heat input capacity of 1.85 MMBtu/hr and fires ASTM D396 compliant #2 fuel oil and/or specification waste oil with a sulfur content not to exceed 0.5% by weight, at a maximum rate of 15.0 gallons/hour.

Pike Industries, Inc. shall include the fuel fired in P910-1 as part of the asphalt batch plant fuel restriction of 480,000 gallons, on a twelve-month rolling total basis.

BPT emission limits for P910-1 were based on the following:

PM/PM_{10}	0.12 lb/MMBtu, BACT from previous license
SO_2	0.5 lb/MMBtu for 0.5%S fuel oil, BACT from previous license
NO_X	0.4 lb/MMBtu, BACT from previous license
CO	5.0 lb/1000 gallons, AP-42, Table 1.3-1, dated 5/10
VOC	0.34 lb/1000 gallons, AP-42, Table 1.3-3, dated 5/10
Opacity	Visible emissions shall not exceed 20% opacity on a six-minute block average basis.

D. Stock Piles and Roadways

Visible emissions from a fugitive emission source shall not exceed an opacity of 20%, except for no more than five minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour.

E. General Process Emissions

Visible emissions from any general process shall not exceed an opacity of 20% opacity on a six-minute block average basis except for no more than one six-minute block average in a one-hour period.

F. Facility Emissions

Pike Industries, Inc. shall be restricted to the following annual emissions, calculated using an annual fuel limit of 480,000 gallons on a twelve-month rolling total basis:

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

Equipment	PM	PM_{10}	SO_2	NO_x	CO	VOC
P910 Rotary Kiln & Heater	2.3	2.3	16.8	11.7	39.0	3.5
Total TPY	**2.3**	**2.3**	**16.8**	**11.7**	**39.0**	**3.5**

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Modeling is not required for a renewal if the total emissions of any pollutant released do not exceed the following and there are no extenuating circumstances:

Pollutant	Tons/Year
PM	25
PM_{10}	25
SO_2	50
NO_x	100
CO	250

Based on the total facility licensed emissions, Pike Industries, Inc. is below the emissions level required for modeling.

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-351-71-L-R, 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. [06-096 CMR 115]

(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 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 emission 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) **Asphalt Batch Plant – P910**

A. Fuel Use

1. Pike Industries, Inc. shall be limited to the use of a total of 480,000 gallons, on a twelve-month rolling total basis, of ASTM D396 compliant #2 fuel oil and/or specification waste oil with a sulfur content not to exceed 0.5% by weight, in the asphalt batch plant. This limit applies to the P910 asphalt plant and the P910-1 hot oil heater. [06-096 CMR 115, BPT]

   Per 38 MRSA §603-A(2)(A)(3), beginning January 1, 2016, the P910 asphalt batch plant and P910-1 hot oil heater shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm), and beginning January 1, 2018, the P910 asphalt batch plant and 910-1 hot oil heater shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm).

2. Fuel use records and receipts for the asphalt batch plant shall be maintained for at least six years and made available to the Department upon request. Fuel use records shall be kept on a monthly and on a twelve-month rolling total basis. [06-096 CMR 115, BPT]

3. A log shall be maintained recording the quantity and analyzed test results of all specification waste oil fired in the asphalt batch plant. [06-096 CMR 115, BPT]

B. Emissions from the asphalt batch plant shall vent to a baghouse, and all components of the asphalt batch plant shall be maintained so as to prevent PM leaks. [06-096 CMR 115, BPT]

C. The performance of the baghouse shall be constantly monitored by either one of the following at all times the asphalt batch plant is operating [06-096 CMR 115, BPT]:

1. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, Pike Industries, Inc. shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.

2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the asphalt batch plant is operating with insufficient control and corrective action shall be taken immediately.

D. To document maintenance of the baghouse, 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 asphalt batch plant location. [06-096 CMR 115, BPT]

E. Emissions from the asphalt batch plant baghouse shall not exceed the following [06-096 CMR 115, BPT]:

Pollutant	gr/dscf	lb/hr
PM	0.03	5.7
PM_{10}	-	5.7
SO_2	-	41.4
NO_x	-	28.8
CO	-	96.0
VOC	-	8.6

F. Opacity from the baghouse is limited to no greater than 20% on a six-minute block average basis, except for no more than two six-minute block averages in a continuous three-hour period. [06-096 CMR 101]

G. Pike Industries, Inc. may process up to 10,000 cubic yards per year of soil contaminated by gasoline or #2 fuel oil without prior approval from the Department. This limit may be exceeded with written authorization from the Department. The plant owner or operator shall notify the Department at least 24 hours prior to processing the contaminated soil and specify the contaminating fuel and quantity, origin of the soil and fuel and the disposition of the contaminated soil. [38 MSRA §608-A, and 06-096 CMR 115, BPT]

H. Pike Industries, Inc. may process up to 5,000 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]

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

J. When processing contaminated soils, Pike Industries, Inc. 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, Pike Industries, Inc. 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) **Stockpiles and Roadways**

Visible emissions from a fugitive emission source shall not exceed an opacity of 20%, except for no more than five minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour. [06-096 CMR 101]

(18) **General Process Sources**

Visible emissions from any general process shall not exceed an opacity of 20% opacity on a six-minute block average basis except for no more than one six-minute block average in a one-hour period. [06-096 CMR 115, BPT]

(19) **Equipment Relocation** [06-096 CMR 115, BPT]

A. Pike Industries, Inc. shall notify the Bureau of Air Quality, by a written notification at least 48 hours prior to relocation of any equipment carried on this license. Written notice may be sent by mail, facsimile (fax), or e-mail. Notification sent by mail shall be sent to the address below or to a Department Regional Office:

Attn: Relocation Notice
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Equipment relocation notification can also be done on-line with e-notice at www.maine.gov/dep/air/compliance/forms/relocation.

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 will be made to the respective county commissioners.

(20) Pike Industries, Inc. 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]

(21) Pike Industries, Inc. 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-C].

DONE AND DATED IN AUGUSTA, MAINE THIS 1st DAY OF November, 2011.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Melissa A. Sims for
PATRICIA W. AHO, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: July 30, 2010
Date of application acceptance: August 23, 2010

Date filed with the Board of Environmental Protection:

This Order prepared by Kevin J Ostrowski, Bureau of Air Quality.

Filed
NOV 2 2011
State of Maine
Board of Environmental Protection