



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE  
GOVERNOR

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COMMISSIONER

**P&K Sand and Gravel, Inc.  
Cumberland County  
Naples, Maine  
A-586-71-F-R**

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

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**

P&K Sand and Gravel, Inc. (P&K), located in Naples, Maine, has applied to renew their Air Emission License permitting the operation of their concrete batch plant and associated equipment. The main office is located at 234 Casco Road, Naples, Maine.

**B. Emission Equipment**

**Heating Equipment**

| <u>Equipment</u> | <u>Max. Input Capacity</u> | <u>Fuel Type</u>       | <u>Maximum Firing Rate</u> | <u>Manufacture Date</u> |
|------------------|----------------------------|------------------------|----------------------------|-------------------------|
| Boiler #1        | 1.4 MMBtu/hr               | #2 fuel oil,<br>0.5% S | 10.0 gal/hr                | 1995                    |

**Concrete Plant**

| <u>Equipment</u>     | <u>Production Rate (cubic yards/hour)</u> | <u>Control Devices</u> |
|----------------------|---|------------------------|
| Concrete Batch Plant | 70  | baghouse               |
| Silo #1              | 66  | baghouse               |
| Silo #2*             | 39  | none                   |

\* Silo #2 is currently out of service but may be reinstated in the future.

**Generator Units**

| <u>Source ID</u> | <u>Max. Input Capacity</u> | <u>Max. Output</u> | <u>Maximum Firing Rate</u> | <u>Fuel Type</u>               |
|------------------|----------------------------|--------------------|----------------------------|--------------------------------|
| Generator #1     | 0.7 MMBtu/hr               | 100 HP             | 5.11 gal/hr                | diesel fuel,<br>0.0015% sulfur |
| Generator #2     | 0.7 MMBtu/hr               | 100 HP             | 5.11 gal/hr                |                                |

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C. Application Classification

The application for P&K does not include the licensing of increased emissions or 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).

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 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. Concrete Batch Plant

The concrete batch plant is rated at 70 cubic yards/hour and includes 2 silos. To meet the requirements of BPT for control of particulate matter (PM) emissions from each cement silo, emissions shall be vented through a baghouse maintained for 99% particulate removal efficiency. Visible emissions from any cement silo baghouse are limited to no greater than 10% opacity on a six-minute block average basis except for no more than one six-minute block average in a one-hour period. The facility shall take corrective action if visible emissions from any baghouse 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-minute block average basis except for no more than one six-minute block average in a one-hour period.

C. Boiler #1

P&K operates Boiler #1 for heating needs. Boiler #1 has a maximum capacity of 1.4 MMBtu/hr firing 10.0 gal/hour of #2 fuel oil with a maximum sulfur content of 0.5% by weight. The boiler was manufactured in 1995.

1. New Source Performance Standards (NSPS)

Due to its size, Boiler #1 is not subject to the 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.

2. BACT/BPT Findings

The BACT/BPT emission limits for Boiler #1 were based on the following:

- PM, PM<sub>10</sub> – 0.12 lb/MMBtu, 06-096 CMR 103
- SO<sub>2</sub> – 0.5 lb/MMBtu, based on firing #2 fuel oil with a maximum sulfur content of 0.5% by weight
- NO<sub>x</sub> – 20 lb/1000 gal, AP-42, Table 1.3-1 (dated 5/10)
- CO – 5 lb/1000 gal, AP-42, Table 1.3-1 (dated 5/10)
- VOC – 0.2 lb/1000 gal, AP-42, Table 1.3-3 (dated 5/10)
- Opacity – 06-096 CMR 101, *Visible Emissions Regulation*

Emission limits for Boiler #1 are as follows:

|                              | <b>PM<br/>(lb/hr)</b> | <b>PM<sub>10</sub><br/>(lb/hr)</b> | <b>SO<sub>2</sub><br/>(lb/hr)</b> | <b>NO<sub>x</sub><br/>(lb/hr)</b> | <b>CO<br/>(lb/hr)</b> | <b>VOC<br/>(lb/hr)</b> |
|------------------------------|-----------------------|------------------------------------|-----------------------------------|-----------------------------------|-----------------------|------------------------|
| Boiler # 1<br>(1.4 MMBtu/hr) | 0.17                  | 0.07                               | 0.70                              | 0.20                              | 0.05                  | 0.002                  |

Visible emissions from Boiler #1 shall not exceed 20% opacity on a six-minute block average, except for no more than one six-minute block average in a three-hour period.

Boiler #1 shall be limited to an annual fuel use not to exceed 15,000 gallons. Prior to January 1, 2016, the fuel oil fired in Boiler #1 shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). Per 38 MRSA §603-A(2)(A)(3), beginning January 1, 2016, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm), and beginning January 1, 2018, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm).

3. Periodic Monitoring

Periodic monitoring for Boiler #1 shall include recordkeeping to document fuel use both on a monthly and a calendar year basis. Documentation shall include the type of fuel used and sulfur content of the fuel.

4. NESHAPs

Boiler #1 may be subject to 40 CFR Part 63, Subpart JJJJJ, *National Emission Standards for Hazardous Air Pollutants [NESHAPs] for Industrial, Commercial, and Institutional Boilers Area Sources*. The unit is considered an existing oil boiler.

For informational purposes, a summary of the currently applicable federal 40 CFR Part 63, Subpart JJJJJ requirements is listed below. At this time, the Maine Department of Environmental Protection has not taken delegation of this area source MACT (Maximum Achievable Control Technology) rule promulgated by EPA; however, P&K 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

i. Initial Notification of Compliance

An Initial Notification submittal to EPA was due on September 17, 2011. [40 CFR Part 63.11225(a)(2)]

ii. Boiler Tune-Up Program

(a) A boiler tune-up program shall be implemented to include the tune-up of applicable boilers by March 21, 2012, according to the rule currently in place. [40 CFR Part 63.11196(a)(1)] However, a No Action Assurance letter was issued on March 13, 2012, stating that EPA will exercise its enforcement discretion to not pursue enforcement action for failure to complete the required tune-up by the stated compliance date. The rule is expected to have a future compliance date in either 2013 or 2014 once the final revisions are promulgated.

(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; however, the burner must be inspected at least once every 36 months. [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. [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 (ppm), by volume, and oxygen in volume percent, before and after adjustments are made. [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 one week of start-up. [40 CFR Part 63.11223(b)(7)]
- (c) A Notification of Compliance Status shall be submitted to EPA no later than 120 days after conducting the initial boiler tune-up. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(b)]
- (d) The facility shall implement a boiler tune-up program after the initial tune-up and initial compliance report has been submitted.
  1. Each tune-up shall be conducted at a frequency specified by the rule and based on the size and age of the boiler. [40 CFR Part 63.11223(a)]
  2. The tune-up compliance report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the concentration of CO in the effluent stream (ppmv) and oxygen in volume percent, measured before and after the boiler tune-up, a description of any corrective actions taken as part of the tune-up of the boiler, and the type and amount of fuel used over the 12 months prior to the tune-up of the boiler. [40 CFR Part 63.11223(b)(6)] The compliance report shall also include the company name and address; a compliance statement signed by a responsible official certifying truth, accuracy, and completeness; and a description of any deviations and corrective actions. [40 CFR Part 63.11225(b)]

b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63, Subpart JJJJJ including the following [40 CFR Part 63.11225(c)]: copies of notifications and reports with supporting compliance documentation; 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; documentation of fuel type(s) used monthly by each boiler; the occurrence and duration of each malfunction of the boiler; and actions taken during periods of malfunction to minimize emissions and actions taken to restore the malfunctioning boiler to its usual manner of operation. Records shall be in a form suitable and readily available for expeditious review.

D. Generators #1 and #2

Generators #1 and #2 have a maximum capacity of 0.7 MMBtu/hr (100 HP) each firing diesel fuel. Generator #1 was manufactured in 1997 and Generator #2 in 2000. The total fuel fired in Generators #1 and #2 shall be limited to 30,000 gallons per calendar year with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight).

1. New Source Performance Standards (NSPS)

Generators #1 and #2 were manufactured prior to April 1, 2006; therefore, Generators #1 and #2 are not subject to NSPS 40 CFR Part 60, Subpart III, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*.

2. BACT/BPT Findings

The BACT/BPT emission limits for the generators are based on the following:

- PM, PM<sub>10</sub> – 0.31 lb/MMBtu from AP-42, Table 3.3-1 (dated 10/96)
- SO<sub>2</sub> – 0.0015lb/MMBtu, based on combustion of #2/diesel fuel oil with a maximum sulfur content of 15 ppm (0.0015% sulfur by weight)
- NO<sub>x</sub> – 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)
- Opacity – 06-096 CMR 101 (dated 5/03)

Emission limits for Generators #1 and #2 are the following:

|                                | <b>PM<br/>(lb/hr)</b> | <b>PM<sub>10</sub><br/>(lb/hr)</b> | <b>SO<sub>2</sub><br/>(lb/hr)</b> | <b>NO<sub>x</sub><br/>(lb/hr)</b> | <b>CO<br/>(lb/hr)</b> | <b>VOC<br/>(lb/hr)</b> |
|--------------------------------|-----------------------|------------------------------------|-----------------------------------|-----------------------------------|-----------------------|------------------------|
| Generator #1<br>(0.7 MMBtu/hr) | 0.22                  | 0.22                               | 0.001                             | 3.09                              | 0.67                  | 0.25                   |
| Generator #2<br>(0.7 MMBtu/hr) | 0.22                  | 0.22                               | 0.001                             | 3.09                              | 0.67                  | 0.25                   |

Visible emissions from each generator shall not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a three-hour period.

3. NESHAPs

The federal regulation 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines* is applicable to Generator #1 and Generator #2. The units are considered existing, stationary, reciprocating, internal combustion engines at an area HAP source not subject to NSPS requirements.

40 CFR Part 63, Subpart ZZZZ requirements for each non-emergency, non-black start compression ignition (diesel, fuel oil) stationary reciprocating internal combustion engine (generator) with a rated output of less than or equal to 300 HP are as follows [40 CFR §63.6603(a), 63.6640, and Table 2(d) of Subpart ZZZZ]:

| Compliance Date           | The facility shall meet the following requirements...   | During periods of startup, the facility shall...  |
|---------------------------|---|---|
| No later than May 3, 2013 | <ul style="list-style-type: none"> <li>- Change oil and filter every 1000 hours of operation or annually, whichever comes first;</li> <li>- Inspect the air cleaner every 1000 hours of operation or annually, whichever comes first;</li> <li>- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary</li> </ul> | Minimize the engine's time spent at idle, and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. |

The generators shall be operated and maintained according to the manufacturer's emission-related written instructions, or P&K shall develop a maintenance plan which provides to the extent practicable for the maintenance and operation of the engines in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR §63.6625(e)]

E. Stock Piles and Roadways

Visible emissions from any fugitive emission source shall not exceed 20% opacity 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.

F. General Process Emissions

Visible emissions from any general process (crusher conveyor belts, bucket elevators, bagging operations, truck loading operations, etc.) 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.

G. Facility Emissions

1. Licensed Annual Emissions

P&K shall be restricted to the following annual emissions, on a calendar year basis. The tons per year limits were calculated based on 15,000 gallons/year of #2 fuel oil (0.5% sulfur) fired in Boiler #1 and a total of 30,000 gallons/year of diesel (0.0015% sulfur) fired in the generators.

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

|                                    | <b>PM</b>  | <b>PM<sub>10</sub></b> | <b>SO<sub>2</sub></b> | <b>NO<sub>x</sub></b> | <b>CO</b>  | <b>VOC</b> |
|------------------------------------|------------|------------------------|-----------------------|-----------------------|------------|------------|
| Boiler #1                          | 0.1        | 0.1                    | 0.5                   | 0.2                   | 0.1        | 0.1        |
| Generators #1 and #2<br>(combined) | 0.6        | 0.6                    | 0.1                   | 9.0                   | 2.0        | 0.8        |
| <b>Total TPY</b>                   | <b>0.7</b> | <b>0.7</b>             | <b>0.6</b>            | <b>9.2</b>            | <b>2.1</b> | <b>0.9</b> |

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<sub>2</sub>e).

Based on the facility's fuel use limits, the worst case emission factors from AP-42, IPCC (Intergovernmental Panel on Climate Change), and *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98, and the global warming potentials contained in 40 CFR Part 98, P&K is below the major source threshold of 100,000 tons of CO<sub>2</sub>e per year. No additional licensing requirements are needed to address GHG emissions at this time.

**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 do not exceed the following and there are no extenuating circumstances:

| <b>Pollutant</b> | <b>Tons/Year</b> |
|------------------|------------------|
| PM               | 25               |
| PM <sub>10</sub> | 25               |
| SO <sub>2</sub>  | 50               |
| NO <sub>x</sub>  | 100              |
| CO               | 250              |

Based on the total facility licensed emissions, P&K 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, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-586-71-F-R, subject to the following conditions.

Severability. The invalidity or unenforceability of any provision or part thereof contained in 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) Concrete Batch Plant**

- A. Particulate emissions from the cement silos shall be vented through a baghouse, and all components of the batch plant 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 and malfunctions and all routine maintenance. The maintenance log shall be kept on-site at the concrete batch plant location. [06-096 CMR 115, BPT]
- C. Visible emissions from the cement silo baghouses are limited to no greater than 10% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period. P&K shall take corrective action if visible emissions from any baghouse exceed 5% opacity. [06-096 CMR 101]
- D. PM emissions from the concrete batching operation 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]

**(17) Boiler #1**

- A. Fuel Use
  - 1. Total fuel use for Boiler #1 shall not exceed 15,000 gallons per calendar of #2 fuel oil. [06-096 CMR 115, BPT]
  - 2. Prior to January 1, 2016, the #2 fuel oil fired in the boiler shall be ASTM D396 compliant (max. sulfur content of 0.5% by weight). [06-096 CMR 115, BPT]
  - 3. Beginning January 1, 2016, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm). [38 MRSA §603-A(2)(A)(3)]
  - 4. Beginning January 1, 2018, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]
  - 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 12-month rolling total basis. [06-096 CMR 115, BPT]

- B. Emissions from Boiler #1 shall not exceed the following [06-096 CMR 115, BPT]:

|                              | PM<br>(lb/hr) | PM <sub>10</sub><br>(lb/hr) | SO <sub>2</sub><br>(lb/hr) | NO <sub>x</sub><br>(lb/hr) | CO<br>(lb/hr) | VOC<br>(lb/hr) |
|------------------------------|---------------|-----------------------------|----------------------------|----------------------------|---------------|----------------|
| Boiler # 1<br>(1.4 MMBtu/hr) | 0.17          | 0.07                        | 0.70                       | 0.20                       | 0.05          | 0.002          |

- C. Visible emissions from Boiler #1 shall not exceed 20% opacity on a six-minute block average, except for no more than one six-minute block average in a continuous three-hour period. [06-096 CMR 101]

(18) **Generators #1 and #2**

A. Fuel Use

- Generators #1 and #2 shall fire diesel fuel with a maximum sulfur content of 15 ppm (0.0015% sulfur by weight). [06-096 CMR 115, BPT]
- Total fuel use for Generators #1 and #2 shall not exceed 30,000 gallons per calendar year of diesel 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 a calendar year basis. [06-096 CMR 115, BPT]

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

|                                | PM<br>(lb/hr) | PM <sub>10</sub><br>(lb/hr) | SO <sub>2</sub><br>(lb/hr) | NO <sub>x</sub><br>(lb/hr) | CO<br>(lb/hr) | VOC<br>(lb/hr) |
|--------------------------------|---------------|-----------------------------|----------------------------|----------------------------|---------------|----------------|
| Generator #1<br>(0.7 MMBtu/hr) | 0.22          | 0.22                        | 0.001                      | 3.09                       | 0.67          | 0.25           |
| Generator #2<br>(0.7 MMBtu/hr) | 0.22          | 0.22                        | 0.001                      | 3.09                       | 0.67          | 0.25           |

- C. Visible emissions from each generator 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 101]

- D. P&K shall operate and maintain Generators #1 and #2 in compliance with 40 CFR Part 63, Subpart ZZZZ requirements no later than May 3, 2013, as follows:

- Change oil and filter for each generator every 1000 hours of operation or annually, whichever comes first;
- Inspect the air cleaner for each generator every 1000 hours of operation or annually, whichever comes first, and replace as necessary; and
- Inspect all hoses and belts of each generator every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[40 CFR §63.6603(a) and Table 2(d)]

4. P&K shall minimize the engines' time spent at idle, and minimize the engines' startup time at startup to a period needed for appropriate and safe loading of each engine, not to exceed 30 minutes. [40 CFR §63.6625(h)]
5. The generators shall be operated and maintained according to the manufacturer's emission-related written instructions, or P&K shall develop a maintenance plan which provides to the extent practicable for the maintenance and operation of the engines in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR §63.6625(e)]

(19) **Stockpiles and Roadways**

Visible emissions from a fugitive emission source shall not exceed 20% opacity, 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]

(20) **General Process Sources**

Visible emissions from any general process (including conveyor belts, bucket elevators, bagging operations, truck loading operations, etc.) shall not exceed 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]

- (21) P&K shall keep a copy of this Order on site and ensure that the operator(s) are familiar with the terms of this Order. [06-096 CMR 115, BPT]
- (22) P&K 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 28<sup>th</sup> DAY OF June, 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *Patricia W. Keefe*  
PATRICIA W. KEEFE, 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: March 12, 2012

Date of application acceptance: March 29, 2012

Date filed with the Board of Environmental Protection:

This Order prepared by Jane Gilbert, Bureau of Air Quality.

