

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

#### **DEPARTMENT ORDER**

Pineland Farms Potato Company, Inc. Aroostook County Mars Hill, Maine A-911-71-H-R/M Departmental
Findings of Fact and Order
Air Emission License
Renewal/Amendment

#### FINDINGS OF FACT

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 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

#### I. REGISTRATION

#### A. Introduction

Pineland Farms Potato Company, Inc. (Pineland) has applied to renew their Air Emission License for the operation of emission sources associated with their potato processing facility.

In addition, Pineland has requested a minor revision to install a peeler and associated exhaust system including a stack.

The equipment addressed in this license is located at 115 Presque Isle Road, Mars Hill, Maine.

# B. Emission Equipment

The following equipment is addressed in this air emission license.

#### **Boilers**

| <b>Equipment</b> | Max. Capacity<br>(MMBtu/hr) | Fuel Type,<br><u>% sulfur</u> | Maximum<br><u>Firing Rate</u> | Date of Manuf. | Date of<br>Install. | Stack# |
|------------------|-----------------------------|-------------------------------|-------------------------------|----------------|---------------------|--------|
| Boiler #1        | 8.37                        | Distillate Fuel, 0.5%         | 60 gal/hr                     | 1996           | 1996                | 1      |
| Boiler #2        | 20.4                        | Distillate Fuel,<br>0.5%      | 146 gal/hr                    | 2004           | 2005                | 2      |
|                  |                             | Natural gas                   | 19,805 scf/hr                 |                |                     |        |

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#### **Process Equipment**

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| <u>Equipment</u> | Production Rate |
|------------------|-----------------|
| Peeler #1        | 80,000 lbs/hr   |
| Peeler #2 (new)  | 20,000 lbs/hr   |

#### C. Definitions

<u>Distillate Fuel</u>. 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 application for Pineland includes the installation of a new peeler and associated exhaust tank and stack. The new equipment will increase the plant and process heating requirements from 60,397 MMBtu/year to an estimated 90,596 MMBtu/year. This increase in heat input demand is well below the license limit for heat input and will not result in a licensed annual emissions increase. The new equipment and heat input will not increase emissions of any pollutant above the previously established licensed annual emission totals. Therefore, this amendment is determined to be a minor revision.

In addition, the license is considered to be a renewal of currently licensed emission units. This renewal and minor revision have been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (CMR) 115 (as amended). This facility is considered a natural minor source with emissions below the major source thresholds for criteria pollutants and hazardous air pollutants (HAP) and is considered an area source of HAP.

# II. BEST PRACTICAL TREATMENT (BPT)

#### 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

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defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

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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. Boiler #1 and #2

Pineland operates Boiler #1 and #2 process for process steam and facility heat. Boiler #1 is rated at 8.37 MMBtu/hr and fires distillate fuel. The boiler was manufactured and installed in 1996 and exhausts through Stack #1.

Boiler #2 is rated at 20.4 MMBtu/hr and fires primarily natural gas with distillate as a back-up fuel. The boiler was manufactured in 2004 and installed in 2005 and exhausts through Stack #2.

# 1. BPT Findings

The BPT emission limits for the boilers were based on the following:

#### Distillate Fuel (Boiler #1 and Boiler #2)

| $PM/PM_{10}$     | _ | 0.08 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT      |
|------------------|---|--|
| $SO_2$           | _ | based on firing distillate fuel with a maximum sulfur  |
|                  |   | content of 0.5% by weight                              |
| $NO_x$           |   | 20 lb/1000 gal based on AP-42 Table 1.3-1 dated 5/10   |
| CO               | _ | 5 lb/1000 gal based on AP-42 Table 1.3-1 dated 5/10    |
| VOC              | _ | 0.34 lb/1000 gal based on AP-42 Table 1.3-3 dated 5/10 |
|                  |   | for Boiler #1  |
|                  |   | 0.2 lb/1000 gal based AP-42 Table 1.3-3 dated 5/10 for |
|                  |   | Boiler #2  |
| Visible          |   | 06-096 C.M.R. ch. 115, BPT                             |
| <b>Emissions</b> |   |  |

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#### Natural Gas

 0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT  $PM/PM_{10}$ 0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98  $SO_2$  100 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98  $NO_x$ CO 84 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98 VOC 5.5 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98

Visible 06-096 C.M.R. ch. 115, BPT

**Emissions** 

The BPT emission limits for the boilers are the following:

| <u>Unit</u> | Fuel        | Pollutant | lb/MMBtu |
|-------------|-------------|-----------|----------|
| Boiler #1   | Distillate  | PM        | 0.08     |
| Boiler #2   | Distillate  | PM        | 0.08     |
| Boiler #2   | Natural Gas | PM        | 0.05     |

| <u>Unit</u>                                | 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 (8.37 MMBtu/hr), distillate fuel | 0.67          | 0.67                        | 4.21                       | 2.51                       | 0.30          | 0.20           |
| Boiler #2 (20.4 MMBtu/hr), distillate fuel | 1.63          | 1.63                        | 10.27                      | 6.12                       | 0.73          | 0.03           |
| Boiler #2 (20.4 MMBtu/hr), natural gas     | 1.02          | 1.02                        | 0.01                       | 1.98                       | 1.66          | 0.11           |

Visible emissions from each boiler firing distillate fuel shall not exceed 20% opacity on a six-minute block average basis.

Visible emissions from each boiler firing natural gas shall not exceed 10% opacity on a six-minute block average basis.

Pineland shall be limited to a heat input of 219,900 MMBtu/year (based on 1,571,000 gallons of distillate fuel) fired in Boilers #1 and #2 on a 12-month rolling total basis.

The following shall be used to determine the monthly heat input at the facility:

$$\left[\frac{gallons\ distillate}{month}\right] \left[\frac{0.14\ MMBtu}{gallons\ distillate}\right] + \left[\frac{scf\ natural\ gas}{month}\right] \left[\frac{0.00103\ MMBtu}{scf\ natural\ gas}\right] = \frac{MMBtu\ Heat\ Input}{month}$$

#### 2. Fuel Sulfur Content Requirements

Boilers #1 and #2 are licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 38 M.R.S. § 603-A(2)(A)(3), as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel

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with a sulfur content greater than 0.0015% by weight (15 ppm). Therefore, beginning July 1, 2018, the distillate fuel purchased or otherwise obtained for use in Boiler #1 and #2 shall not exceed 0.0015% by weight (15 ppm).

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### 3. Periodic Monitoring

Periodic monitoring for the boilers shall include recordkeeping to document fuel use both on a monthly and 12-month rolling total basis. Documentation shall include the type of fuel used and sulfur content of the fuel, if applicable, and calculation of monthly and yearly heat input total.

4. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

Due to the size, Boiler #1 is not subject to Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

Due to the size, Boiler #2 is subject to Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

Pineland shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boiler #2 including, but not limited to, the following:

- a. Pineland shall record and maintain records of the amounts of each fuel combusted during each day or, if applicable, monthly records with fuel certifications. [40 C.F.R. § 60.48c(g)]
- b. Pineland shall submit semi-annual reports to EPA and to the Department. These reports shall include the calendar dates covered in the reporting period and records of fuel supplier certifications. The semi-annual reports are due within 30 days of the end of each six-month period. [40 C.F.R. § 60.48c(j) and 06-096 C.M.R. ch. 115, BPT]
- c. The following address for EPA shall be used for any reports or notifications required to be copied to them:

U.S. Environmental Protection Agency, Region I 5 Post Office Square, Suite 100 (OES04-2) Boston, MA 02109-3912 Attn: Air Compliance Clerk

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5. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart JJJJJJ

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Boiler #1 and Boiler #2 are subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJJ. Boiler #1 is considered an existing oil boiler, rated less than 10 MMBtu/hr. Boiler #2 is considered an existing dual fuel boiler, rated greater than 10 MMBtu/hr and is equipped with an oxygen trim system. [40 C.F.R. § 63.11193 and § 63.11195]

Boiler #2 operates as a gas-fired boiler. Gas-fired boilers are exempt from 40 C.F.R. Part 63, Subpart JJJJJ. However, boilers which fire fuel oil are not. A "gas-fired boiler" is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. [40 C.F.R. § 63.11237]

A summary of the currently applicable federal 40 C.F.R. Part 63, Subpart JJJJJJ requirements is listed below. At this time, the Department has not taken delegation of this area source MACT (Maximum Achievable Control Technology) rule promulgated by EPA; however, Pineland is still subject to the requirements. Notification forms and additional rule information can be found on the following website: <a href="http://www.epa.gov/ttn/atw/boiler/boilerpg.html">http://www.epa.gov/ttn/atw/boiler/boilerpg.html</a>.

- a. Compliance Dates, Notifications, and Work Practice Requirements
  - (1) Initial Notification of Compliance

An Initial Notification submittal to EPA was due no later than January 20, 2014; [40 C.F.R. § 63.11225(a)(2)]

Pineland submitted their Initial Notification to EPA on Pineland submitted their initial notification on September 15, 2011.

- (2) Boiler Tune-Up Program
  - (i) A boiler tune-up program shall be implemented. [40 C.F.R. § 63.11223]
  - (ii) Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

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| Boiler Category   | Tune-Up<br><u>Frequency</u> |
|---|-----------------------------|
| Boiler #1   | Every 2 years               |
| Boiler #2, if operated as an existing oil fired boiler* | Every 5 years**             |

<sup>\*</sup> tune-up requirement does not apply if designated as a gas fired boiler.

[40 C.F.R. § 63.11223(a) and Table 2]

\*\* Boiler 2 is equipped with an oxygen trim system

[40 C.F.R. § 63.11223(c) and Table 2]

- (iii) 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, not to exceed 36 months from the previous inspection. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 C.F.R. § 63.11223(b)(1)]
  - 2. Inspect the flame pattern, <u>as applicable</u>, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 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. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 C.F.R. § 63.11223(b)(3)]
  - 4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
  - 5. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 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 30 days of start-up.

    [40 C.F.R. § 63.11223(b)(7)]

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- (iv) <u>Tune-Up Report</u>: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
  - 1. The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
  - 2. A description of any corrective actions taken as part of the tune-up of the boiler; and
  - 3. The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]
- (v) After conducting the initial boiler tune-up, a Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014. [40 C.F.R. § 63.11225(a)(4) and 40 C.F.R. § 63.11214(b)] Pineland submitted their Notification of Compliance Status to EPA on July 18, 2012.

# (3) Compliance Report

A compliance report for Boiler #1 shall be prepared by March 1<sup>st</sup> biennially which covers the previous two calendar years. If Boiler #2 no longer meets the definition of a gas-fired boiler, then a compliance report for Boiler #2 shall be prepared by March 1<sup>st</sup> every five years which covers the previous five calendar years. The report shall be maintained by the source and submitted to the Department and to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

- (i) Company name and address;
- (ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;
- (iii)A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- (iv) The following certifications, as applicable:
  - 1. "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
  - 2. "No secondary materials that are solid waste were combusted in any affected unit."

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3. "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

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## (4) Energy Assessment

Due to its size Boiler #1 is not subject to the Energy Assessment requirement. Boiler #2 shall be required to conduct an energy assessment if it no longer meets the definition of a gas fired boiler and would be considered an existing oil fired boiler. Upon making the fuel switch, Pineland shall be subject to the energy assessment requirements as follows:

- (i) A one-time energy assessment is required to be performed by a qualified energy assessor Boiler #2 no later than 180 days of the fuel switch. [40 C.F.R. § 63.11210(i)]
- (ii) The energy assessment shall include a visual inspection of the boiler system; an evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints; an inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator; a review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage; a list of major energy conservation measures that are within the facility's control; a list of the energy savings potential of the energy conservation measures identified; and a comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments. [40 C.F.R. Part 63, Subpart JJJJJ, Table 2(16)]
- (iii) A Notification of Compliance Status shall be required to be submitted to EPA. [40 C.F.R. § 63.11225(a)(4) and 40 C.F.R. § 63.11214(c)]

#### (5) Fuel Switch

If Pineland switches to firing distillate fuel, then Boiler #2 shall be subject to Subpart JJJJJ, Pineland must provide notice of the date upon which it switched fuels within 30 days of the change. Compliance with applicable standards must be demonstrated within 180 days of the effective date of the fuel switch.

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The notification must identify:

- (i) The name of the owner or operator of the affected source, the location of the source, the boiler that have switched fuels, were physically changed, or took a permit limit, and the date of the notice.
- (ii) The date upon which the fuel switch, physical change, or permit limit occurred.

[40 C.F.R. § 63.11210(i) and 40 C.F.R. § 63.11225(g)]

# (6) Recordkeeping

Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJJ including the following [40 C.F.R. § 63.11225(c)]:

- (i) Copies of notifications and reports with supporting compliance documentation;
- (ii) 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;
- (iii)Records of the occurrence and duration of each malfunction of each applicable boiler; and
- (iv)Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review.

EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. [40 C.F.R. § 63.11225(a)(4)(vi)]

# C. Peelers

Pineland intends to install a new 20,000 pound/hour peeler in the spring of 2017. The new peeler system will include a new building to house the new peeler and a steam pressure exhaust tank with a stack to vent the exhaust steam. There are no emissions expected from this stack since it is only to release the pressure from the steam vessel.

This exhaust tank is on the discharge side of the pressure vessel and is used to exhaust steam from the pressure vessel to atmospheric pressure. The exhaust tank has a 24 inch exhaust pipe that will go through the roof extending approximately 12 feet above the roof line. This vessel has a cyclone shaped interior to eliminate miscellaneous peel material from escaping through the stack. This new design does not require the use of water sprays.

Pineland operates an existing steam peeler, Peeler #1, with a maximum raw material process rate of 80,000 pound per hour. BPT for this peeler shall be the use of water

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sprays on the peeler exhaust when it is in operation. BACT for the new peeler is the cyclone shaped interior design to eliminate peel material from escaping through the stack.

#### D. General Process Emissions

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis.

#### E. Annual Emissions

#### 1. Total Annual Emissions

Pineland shall be restricted to the following annual emissions, based on a 12-month rolling total and a facility wide heat input limit of 219,900 MMBtu/year.

# Total Licensed Annual Emissions for the Facility Tons/year

(used to calculate the annual license fee)

|           | <u>PM</u> | <u>PM</u> <sub>10</sub> | <u>SO</u> 2 | NO <sub>x</sub> | <u>co</u> | <u>VOC</u> |
|-----------|-----------|-------------------------|-------------|-----------------|-----------|------------|
| Boilers   | 8.8       | 8.8                     | 55.4        | 33.0            | *8.02     | *0.53      |
| Total TPY | 8.8       | 8.8                     | 55.4        | 33.0            | *8.02     | *0.53      |

<sup>\*</sup> CO and VOC were corrected from the Annual Emissions table found in A-911-71-F-M(4/9/2013) to take into account the higher CO and VOC levels when firing natural gas.

#### 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 C.F.R. Part 52, Subpart A, § 52.21, Prevention of Significant Deterioration of Air Quality rule. Greenhouse gases, as defined in 06-096 C.M.R. ch. 100, 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).

The quantity of CO<sub>2</sub>e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's fuel use limit;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and *Mandatory Greenhouse Gas Reporting*, 40 C.F.R. Part 98; and
- global warming potentials contained in 40 C.F.R. Part 98.

No additional licensing actions to address GHG emissions are required at this time.

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# 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:

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| <u>Pollutant</u> | Tons/Year |
|------------------|-----------|
| PM <sub>10</sub> | 25        |
| $SO_2$           | 50        |
| $NO_x$           | 50        |
| СО               | 250       |

The total annual licensed emissions for the facility are above at least one of the emission levels contained in the table above; however, after taking into consideration the following factors:

- similarity with other licensed sources based on size, emissions, and local topography;
- location, including proximity to other sources, complex terrain and Class I areas; and
- background air quality data available in or representative of the local area,

the Department has determined that an ambient air quality impact analysis is not required for the facility and that Ambient Air Quality Standards (AAQS) will not be exceeded.

#### **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 Renewal and Amendment A-911-71-H-R/M subject to the following conditions.

<u>Severability</u>. 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.

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#### 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 (38 M.R.S. § 347-C).

- (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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]

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(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 C.M.R. ch. 115]

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- (11) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. 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 C.F.R. 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 C.M.R. ch. 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 C.F.R. 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

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- 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 C.M.R. ch. 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 C.M.R. ch. 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 emissions 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 C.M.R. ch. 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 C.M.R. ch. 115]

#### SPECIFIC CONDITIONS

### (16) **Boilers #1 and #2**

#### A. Fuel

- 1. Annual heat input to Boiler #1 and Boiler #2 combined shall be limited to 219,900 MMBtu/year based on a 12 month-rolling total basis.
- 2. Using a heating value of 0.14 MMBtu/gal for distillate fuel and 0.00103 MMBtu/scf for natural gas, the following calculation shall be used to calculate monthly heat input:

$$\left[\frac{gailons\ distillate}{month}\right] \left[\frac{0.14\ MMBtu}{gailons\ distillate}\right] + \left[\frac{scf\ natural\ gas}{month}\right] \left[\frac{0.00103\ MMBtu}{scf\ natural\ gas}\right] = \frac{MMBtu\ Heat\ Input}{month}$$

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

3. Prior to July 1, 2018, the facility shall fire distillate fuel with a maximum sulfur content not to exceed 0.5% by weight. [06-096 C.M.R. ch. 115, BPT]

4. Beginning July 1, 2018, 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, BPT]

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- 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) and calculation of monthly and 12 month rolling total heat input. 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:

| Emission Unit | <u>Pollutant</u> | <u>lb/MMBtu</u> | Origin and Authority       |
|---------------|------------------|-----------------|----------------------------|
| Boiler #1     | PM               | 0.08            | 06-096 C.M.R. ch. 115, BPT |
| Boiler #2     | PM               | 0.08            | 06-096 C.M.R. ch. 115, BPT |
| Distillate    |                  |                 |                            |
| Boiler #2     | PM               | 0.05            | 06-096 C.M.R. ch. 115, BPT |
| Natural gas   |                  |                 |                            |

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

| Emission<br><u>Unit</u>  | 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>Distillate  | 0.67          | 0.67                        | 4.21                       | 2.51                       | 0.30          | 0.20           |
| Boiler #2<br>Distillate  | 1.63          | 1.63                        | 10.27                      | 6.12                       | 0.73          | 0.03           |
| Boiler #2<br>Natural gas | 1.02          | 1.02                        | 0.01                       | 1.98                       | 1.66          | 0.11           |

- D. Visible emissions from Boiler #1 or Boiler #2, when firing distillate, shall each not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]
- E. Visible emissions from Boiler #2, when firing natural gas, shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]
- F. Pineland shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boiler #2 including, but not limited to, the following:
  - 1. Pineland shall record and maintain records of the amounts of each fuel combusted during each day or, if applicable, monthly records with fuel certifications [40 C.F.R. § 60.48c(g)]

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- 2. Pineland shall submit semi-annual reports to EPA and to the Department. These reports shall include the calendar dates covered in the reporting period and records of fuel supplier certifications. The semi-annual reports are due within 30 days of the end of each six-month period.

  [40 C.F.R. § 60.48c(j) and 06-096 C.M.R. ch. 115, BPT]
- 3. The following address for EPA shall be used for any reports or notifications required to be copied to them:

U.S. Environmental Protection Agency, Region I 5 Post Office Square, Suite 100 (OES04-2) Boston, MA 02109-3912 Attn: Air Compliance Clerk

- G. Boiler MACT (40 C.F.R. Part 63, Subpart JJJJJJ) Requirements for Boiler #1 [incorporated under 06-096 C.M.R. ch. 115, BPT]
  - 1. The facility shall implement a boiler tune-up program. [40 C.F.R. § 63.11223]
    - a. Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

|                 | Tune-Up          |
|-----------------|------------------|
| Boiler Category | <b>Frequency</b> |
| Boiler #1       | Every 2 years    |

[40 C.F.R. § 63.11223(a) and Table 2]

- 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, not to exceed 36 months from the previous inspection. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 C.F.R. § 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 C.F..R § 63.11223(b)(2)]
  - (3) Inspect the system controlling the air-to-fuel ratio, <u>as applicable</u>, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed

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36 months from the previous inspection. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 C.F.R. § 63.11223(b)(3)]

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- (4) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
- (5) Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 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 30 days of start-up.

  [40 C.F.R. § 63.11223(b)(7)]
- c. <u>Tune-Up Report</u>: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
  - (1) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
  - (2) A description of any corrective actions taken as part of the tune-up of the boiler; and
  - (3) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

# 2. Compliance Report

For Boiler #1, A compliance report shall be prepared by March 1<sup>st</sup> biennially which covers the previous two calendar years. The report shall be maintained by the source and submitted to the Department and to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

- a. Company name and address;
- b. A statement of whether the source has complied with all the relevant requirements of this Subpart;
- c. A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;

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d. The following certifications, as applicable:

- (1) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
- (2) "No secondary materials that are solid waste were combusted in any affected unit."
- (3) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."
- 3. Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJJ including the following [40 C.F.R. § 63.11225(c)]:
  - a. Copies of notifications and reports with supporting compliance documentation;
  - b. 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;
  - c. Records of the occurrence and duration of each malfunction of each applicable boiler; and
  - d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

### (17) Peelers

Pineland shall maintain and operate water spray on Peeler #1 exhaust whenever Peeler #1 is in operation. [A-911-71-A-N (12/10/2004), BPT]

# (18) General Process Sources

Visible emissions from any general process source including the peeler shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

#### (19) Annual Emission Statement

In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, the licensee 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.

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(20) Pineland shall notify the Department within 48 hours and submit a report to the Department on a <u>quarterly basis</u> if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S. § 605).

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Done and dated in Augusta, maine this 3/ day of March, 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Wen Kovert Corre for PAUL MERCER, COMMISSIONER

The term of this license shall be ten (10) years from the signature date above.

[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: 11/10/2015

Date of application acceptance: 11/12/2015

Date filed with the Board of Environmental Protection:

This Order prepared by Lisa P. Higgins, Bureau of Air Quality.

Filed

APR 0 3 2017

State of Maine Board of Environmental Protection