



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

**LaBree's
Penobscot County
Old Town, Maine
A-783-71-F-R**

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

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

I. REGISTRATION

A. Introduction

LaBree's Bakery (LaBree's) has applied to renew their Air Emission License permitting the operation of emission sources associated with their bakery products manufacturing facility.

The equipment addressed in this license is located at 169 Gilman Falls Avenue, Old Town, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Fuel Burning Equipment

| <u>Equipment</u> | <u>Maximum Capacity (MMBtu/hr)</u> | <u>Maximum Firing Rate (scf/hr)</u> | <u>Fuel Type</u> | <u>Date of Manuf.</u> | <u>Stack #</u> |
|-------------------------|---|--|-------------------------|------------------------------|-----------------------|
| Boiler #1 | 3.65 | 3,476 | Natural Gas | 1994 | BL#1 |
| Oven #1 | 9.0 | 8,571 | Natural Gas | 1994 | OV#1 |
| Oven #2 | 9.0 | 8,571 | Natural Gas | 2011 | OV#2 |
| Oven #3 | 3.0 | 2,857 | Natural Gas | 2008 | OV#3 |
| Dishwasher #1 | 1.1 | 1,048 | Natural Gas | 2005 | DW#1 |
| Dishwasher #2 | 1.5 | 1,429 | Natural Gas | 2005 | DW#2 |

Note: LaBree's also operates a donut fryer, basket washer, hot water heaters, and space heaters but they are each below 1 MMBtu/hr and are considered insignificant activities per 06-096 CMR 115 Appendix B.

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD, SUITE 6
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769
(207) 764-0477 FAX: (207) 760-3143

C. Application Classification

The application for LaBree's 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 currently licensed emission units only and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (CMR) 115 (as amended). It is impossible for LaBree's to exceed the major source thresholds for criteria pollutants and thus is considered a natural minor. With the annual fuel limit on Boiler #1, Oven #1, Oven #2, Oven #3, Dishwasher #1, and Dishwasher #2, the facility is licensed below the major source thresholds for 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 defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment.

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. Fuel Burning Equipment

LaBree's operates Boiler #1 for steam, Ovens #1-3 for baking, and Dishwashers #1-2 for washing and rinsing baking equipment. All fuel burning equipment at LaBree's fires natural gas and exhaust through their own stacks. Boiler #1 has a maximum design heat input capacity of 3.7 MMBtu/hr with a firing rate of 3,476 scf/hr and was manufactured in 1994. Oven #1 and Oven #2 each have a maximum design heat input capacity of 9.0 MMBtu/hr with a firing rate of 8,571 scf/hr and were manufactured in 1994 and 2011, respectively. Oven #3 has a maximum design heat input capacity of 3.0 MMBtu/hr with a firing rate of 2,857 scf/hr and was manufactured in 2008. Dishwasher #1 has a maximum design heat input capacity of 1.1 MMBtu/hr with a firing rate of 1,048 scf/hr and was manufactured in 2005. Dishwasher #2 has a maximum design heat input capacity of 1.5 MMBtu/hr with a firing rate of 1,429 scf/hr and was manufactured in 2005. LaBree's has a facility-wide fuel use limit of 60 MMscf/yr for all licensed fuel burning equipment combined.

1. BPT Findings

The BPT emission limits for the fuel burning equipment were based on the following:

Natural Gas

- PM/PM₁₀ – 0.05 lb/MMBtu based on 06-096 CMR 115, BPT
- SO₂ – 0.6 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98
- NO_x – 100 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98
- 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
- Opacity – 06-096 CMR 101

The BPT emission limits for the fuel burning equipment are the following:

| <u>Unit</u> | <u>Pollutant</u> | <u>lb/MMBtu</u> |
|---|------------------|-----------------|
| Boiler #1, Oven #1, Oven #2, Oven #3 [each] | PM | 0.05 |

| <u>Unit</u> | <u>PM (lb/hr)</u> | <u>PM₁₀ (lb/hr)</u> | <u>SO₂ (lb/hr)</u> | <u>NO_x (lb/hr)</u> | <u>CO (lb/hr)</u> | <u>VOC (lb/hr)</u> |
|-------------------------------|-----------------------|------------------------------------|-----------------------------------|-----------------------------------|-----------------------|------------------------|
| Boiler #1 | 0.18 | 0.18 | 0.01 | 0.35 | 0.30 | 0.02 |
| Oven #1 and Oven #2 [each] | 0.45 | 0.45 | 0.01 | 0.87 | 0.73 | 0.05 |
| Oven #3 | 0.15 | 0.15 | 0.01 | 0.29 | 0.24 | 0.02 |
| Dishwasher #1 | 0.06 | 0.06 | 0.01 | 0.11 | 0.09 | 0.01 |
| Dishwasher #2 | 0.08 | 0.08 | 0.01 | 0.15 | 0.12 | 0.01 |

Visible emissions from Boiler #1, Ovens #1-3 (each), and Dishwashers #1-2 (each) shall not exceed 10% opacity on a 6-minute block average, except for no more than one (1) six (6) minute block average in a 3-hour period.

LaBree's shall be limited to 60 MMscf/yr of natural gas for all licensed fuel burning equipment combined.

2. Periodic Monitoring

Periodic monitoring for all licensed fuel burning equipment shall include recordkeeping to document facility-wide fuel use both on a monthly and calendar year basis. Documentation shall include the type and volume of fuel used.

3. VOC emissions from Oven #1, Oven #2, and Oven #3 baking processes

LaBree's uses baking powder as a leavening agent in its baking processes instead of yeast, so it does not fall under EPA's AP-42 Section 9.9.6, *Bread Baking*, for

estimating VOC emissions from bread bakeries. According to EPA's Emission Inventory Improvement Program under Volume 3, *Area Sources*, baking powder works to leaven bread chemically and does not produce VOC emissions. The Department expects that any potential VOC emissions from the use of baking powder or baking soda in the baking process are either negligible or not readily quantifiable.

4. 40 Code of Federal Regulations (CFR) Part 60, Subpart Dc

Due to their size, Boiler #1, Oven #1, Oven #2, Oven #3, Dishwasher #1, and Dishwasher #2 are not subject to the New Source Performance Standards (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.

5. 40 CFR Part 63, Subpart JJJJJ

Boiler #1, Ovens #1-3 and Dishwashers #1-2 are not subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ). Ovens #1-3, and Dishwashers #1-2 are not boilers as defined in 40 CFR Part 63 §11237 and thus are not subject to 40 CFR Part 63, Subpart JJJJJ. Boiler #1 is considered a gas-fired boiler as defined in 40 CFR Part 63, Subpart JJJJJ and thus is not subject to this subpart.

C. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour.

D. General Process Emissions

Visible emissions from any general process source shall not exceed an opacity of 20% 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.

E. Annual Emissions

1. Total Annual Emissions

LaBree's shall be restricted to the following annual emissions, based on a calendar year total. The tons per year limits were calculated based on a facility-wide fuel use limit of 60 MMscf/yr for all licensed fuel burning equipment combined:

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

| | PM | PM ₁₀ | SO ₂ | NO _x | CO | VOC |
|--|------------|------------------|-----------------|-----------------|------------|------------|
| Boiler #1, Oven #1, Oven #2, Oven #3, Dishwasher #1, Dishwasher #2 [combined] | 1.6 | 1.6 | 0.1 | 3.0 | 2.5 | 0.2 |
| Total TPY | 1.6 | 1.6 | 0.1 | 3.0 | 2.5 | 0.2 |

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 (CO₂e).

The quantity of CO₂e 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 40 CFR Part 98, *Mandatory Greenhouse Gas Reporting*; and
- global warming potentials contained in 40 CFR Part 98.

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

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source shall be determined by the Department on a case-by case basis. In accordance with 06-096 CMR 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:

| <u>Pollutant</u> | <u>Tons/Year</u> |
|------------------|------------------|
| PM ₁₀ | 25 |
| SO ₂ | 50 |
| NO _x | 50 |
| CO | 250 |

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

ORDER

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

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

The Department hereby grants Air Emission License A-783-71-F-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 (38 M.R.S.A. §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 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 Title 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 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 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) Fuel Burning Equipment

A. Fuel

1. Total fuel use for Boiler #1, Oven #1, Oven #2, Oven #3, Dishwasher #1, and Dishwasher #2 combined shall not exceed 60 MMscf/yr of natural gas based on a calendar year total basis. [06-096 CMR 115, BPT]
2. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of the fuel delivered. Records of facility-wide annual fuel use for all licensed fuel burning equipment combined shall be kept on a monthly and calendar year total basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

| Emission Unit | Pollutant | lb/MMBtu | Origin and Authority |
|---|------------------|-----------------|-----------------------------|
| Boiler #1, Oven #1, Oven #2, Oven #3 [each] | PM | 0.05 | 06-096 CMR 115, BPT |

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

| Emission Unit | PM (lb/hr) | PM₁₀ (lb/hr) | SO₂ (lb/hr) | NO_x (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|----------------------------|-----------------------|------------------------------------|-----------------------------------|-----------------------------------|-----------------------|------------------------|
| Boiler #1 | 0.18 | 0.18 | 0.01 | 0.35 | 0.30 | 0.02 |
| Oven #1 and Oven #2 [each] | 0.45 | 0.45 | 0.01 | 0.87 | 0.73 | 0.05 |
| Oven #3 | 0.15 | 0.15 | 0.01 | 0.29 | 0.24 | 0.02 |
| Dishwasher #1 | 0.06 | 0.06 | 0.01 | 0.11 | 0.09 | 0.01 |
| Dishwasher #2 | 0.08 | 0.08 | 0.01 | 0.15 | 0.12 | 0.01 |

- D. Visible emissions from Boiler #1, Ovens #1-3, and Dishwashers #1-2 (each) shall not exceed 10% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period. [06-096 CMR 101]

(17) Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour. [06-096 CMR 101]

LaBree's
Penobscot County
Old Town, Maine
A-783-71-F-R

10

Departmental
Findings of Fact and Order
Air Emission License
Renewal

(18) **General Process Sources**

Visible emissions from any general process source shall not exceed an opacity of 20% 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]

- (19) LaBree's 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 26 DAY OF August, 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Corne for
PATRICIA W. AHO, COMMISSIONER

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: July 6, 2015

Date of application acceptance: July 7, 2015

Date filed with the Board of Environmental Protection:

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

