



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

**Buckeye Terminals, LLC
Penobscot County
Bangor, Maine
A-202-71-J-R (SM)**

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

FINDINGS OF FACT

After review of the air emissions 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

1. Buckeye Terminals, LLC (Buckeye) has applied to renew their Air Emission License permitting the operation of emission sources associated with their petroleum storage and distribution facility.
2. The equipment addressed in this license is located at 730 Main Street, Bangor, ME.

B. Emission Equipment

The following equipment is addressed in this air emission license:

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

Bulk Storage Equipment

<u>Tank Number</u>	<u>Capacity (Gallons)</u>	<u>Product Type</u>	<u>Installation Date</u>	<u>Roof Type</u>	<u>Control Device</u>
Tank 6	253,456	Distillate	1895	Cone Roof, Fixed, Riveted	N/A
Tank 8	1,027,804	Distillate	1913	Cone Roof, Fixed, Riveted	N/A
Tank 9	478,380	Gasoline, Ethanol, Distillate	1913	Internal Floating Roof	Floating Roof
Tank 10	373,669	Distillate	1920	Cone Roof, Fixed, Riveted	N/A
Tank 11	1,061,298	Gasoline, Ethanol, Distillate	1920	Internal Floating Roof	Floating Roof
Tank 16	347,256	Gasoline, Ethanol, Distillate	1925	Internal Floating Roof	Floating Roof
Tank 18	183,498	Gasoline, Ethanol, Distillate	1917	Internal Floating Roof	Floating Roof
Tank 19	253,429	Distillate	1924	Cone Roof, Fixed, Riveted	N/A
Tank 20	967,050	Gasoline, Ethanol, Distillate	1972	Internal Floating Roof	Floating Roof

Process Equipment

<u>Equipment</u>	<u>Production Rate</u>	<u>Pollution Control Equipment</u>
Loading Rack	230,000 gallons/4 hours	Vapor Recovery Unit

Buckeye has additional tanks which are considered insignificant activities under 06-096 CMR 115, Appendix B, Section B.7. This equipment is noted for inventory completeness only.

Tanks - Insignificant Activities

<u>Tank Number</u>	<u>Capacity</u> (Gallons)	<u>Contents</u>
Tank 14	575	Additive
Tank 15	19,000	Petroleum Contact Water
Tank 21	3,000	Additive
Tank 22	2,000	Additive
Tank 23	4,000	Additive
Tank OUD	550	Own-use Heating Oil

C. Application Classification

The application for Buckeye 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). With the emissions limits on volatile organic compounds (VOC) and hazardous air pollutants (HAP) the facility is licensed below the major source thresholds for criteria pollutants and is considered a synthetic minor. With the HAP limits, 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 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. Bulk Storage Tanks

The nine storage tanks for gasoline, ethanol and distillate have construction dates ranging from 1895 to 1972, and are all therefore constructed prior to June 11, 1973. As these tanks predate the applicability date, none of the tanks are subject to 40 CFR Part 60, Subparts K, Ka or Kb.

C. Loading Rack

The Loading Rack consists of two bays, a vapor collection system and a Vapor Recovery Unit (VRU). The VRU has a maximum process capacity of 230,000 gallons per four (4) hour period, and consists of two bays. Bay #1 transfers gasoline, ethanol and distillate, while Bay #3 transfers gasoline, ethanol, distillates and transmix (a mixture of gasoline and distillate from the pipeline). The loading rack also receives shipments of denatured ethanol. The VRU is a carbon adsorption system manufactured by the John Zink Company. Buckeye is subject to 40 CFR Part 60, Subpart XX for Bulk Gasoline Terminals constructed or reconstructed after December 17, 1980.

Emissions from the VRU are limited to 35 mg/litre of product loaded. Previous testing showed emissions less than 5 mg/litre of product loaded. If emissions from the VRU exceed 10 mg/litre of product loaded, Buckeye shall take necessary action to ensure emissions do not exceed 35 mg/litre of product loaded. [06-096 CMR 115, BPT, 40 CFR 60.502(b)]

The Department conducted a streamlining analysis of the regulations in 40 CFR Part 60, Subpart XX and concludes compliance with the provisions of this permit will assure compliance with the requirements of 40 CFR Part 60, Subpart XX.

D. VOC RACT

Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds (VOC-RACT), 06-096 CMR 134 require facilities that have the potential to emit forty (40) tons or more of VOC per calendar year apply VOC RACT to their applicable VOC emissions.

In accordance with 06-096 CMR 134, Section 3(A)(1), Option A, the owner or operator must install and operate a system to capture and control VOC emissions such that the total VOC emissions do not exceed, on a daily basis, fifteen (15%) percent of the uncontrolled daily VOC emissions. Buckeye's use of internal floating roofs for gasoline storage tanks and a vapor recovery system rated at 35 mg/litre of product loaded meets the requirements of Chapter 134 by controlling VOC emissions such that VOC emissions do not exceed, on a daily basis, fifteen (15%) percent of the uncontrolled daily VOC emissions.

E. Annual Emissions

1. Total Annual Emissions

Buckeye shall be restricted to the following annual emissions, based on a 12-month rolling total.

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

<u>Pollutant</u>	<u>Tons per Year</u>
VOC	49.9
Single HAP	9.9
Total HAP	24.9

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).

Based on the facility's fuel use limit(s), 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, Buckeye is below the major source threshold of 100,000 tons of CO₂e per year. Therefore, no additional licensing requirements are needed to address GHG emissions 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 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	100
CO	250

The total facility licensed emissions 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-202-71-J-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) Tanks 9, 11, 16, 18 and 20 – Maintenance and Operation Requirements

Tanks 9, 11, 16, 18 and 20 shall be equipped, maintained, and operated such that:

- A. There is an internal floating roof with closure seal(s) between the roof edge and the tank wall, and these are maintained so as to prevent vapor leakage.
- B. The internal floating roof and closure seal(s) will be maintained such that there are no holes, tears, or other openings in the seal or between the seal and the floating roof.
- C. All storage tank openings, except stub drains, are equipped with covers, lids or seals which remain closed at all times.
- D. All automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports.
- E. All rim vents, if provided, are to be set to open only when the roof is being floated off let supports or at the manufacturer's recommended setting.
- F. If any holes, tears or other openings are present the Department shall be notified within 10 (ten) days of discovery of such holes, tears, or openings and of the course of action to be taken for repair. Buckeye shall demonstrate to the Department that the repairs were made as soon as practicable.

[06-096 CMR 111]

(17) Tanks 9, 11, 16, 18 and 20 – Inspection Requirements

Buckeye shall comply with the following source inspection requirements for Tanks 9, 11, 16, 18 and 20:

- A. Routine inspections of floating roofs are to be conducted through roof hatches once every month.
- B. A complete inspection of the cover and seal is to be performed at least once every ten years and each time the vessel is emptied and degassed. These inspections shall be conducted by visually inspecting the floating roof deck, deck fittings, and rim seals, and may be conducted entirely from the top side of the floating roof as long as there is visual access to all deck components.
- C. Buckeye shall not empty and degas any gasoline or ethanol storage tank for the purpose of performing a complete inspection between June 1 and August 31 of each calendar year.

- D. Notwithstanding (17)C of this permit, Buckeye may empty and degas a gasoline or ethanol storage vessel for the purpose of performing a repair which is immediately necessary for proper function of the vessel. An owner or operator must notify the Department within 24 hours if a fixed roof storage vessel is emptied and degassed in such an emergency.
[06-096 CMR 111]
- (18) The following records shall be maintained for a period of six years at the source and available for inspection by the Department [06-096 CMR 115, BPT]:
- A. An inspection log shall be kept documenting each inspection, and detected leaks, holes, tears or other openings, and the corrective action taken to demonstrate compliance with Condition (16).
 - B. Monthly throughput specifying quantity and types of volatile petroleum liquids in each tank and the period of storage.
 - C. Calculations showing annual VOC emissions from equipment seal, and transfer piping and fittings.
 - D. Average monthly product storage temperatures and maximum true vapor pressures or Reid vapor pressures of volatile petroleum liquids stored.
- (19) The bulk gasoline terminal shall be equipped, maintained and operated with a vapor collection and carbon adsorption system, which captures displaced VOC vapors from a tank truck whenever gasoline or ethanol is being transferred, resulting in VOC vapor being displaced from a tank truck. The vapor collection system shall be designed to prevent any vapors collected at one loading bay from passing to another bay. Buckeye shall take steps to assure the tank truck is connected to the vapor collections system during each loading event. [06-096 CMR 115, BPT, 06-096 CMR 112, 40 CFR 60.502(a), (b) & (g)]
- (20) All loading and vapor lines shall be equipped and maintained in good working order such that vapor-tight fittings close automatically when disconnected and the pressure in the vapor collection system shall not be allowed to exceed plus (+18) eighteen inches of water or a vacuum of minus six (-6) inches of water. Pressure gauges shall be maintained to document compliance with this limit. [06-096 CMR 112, 40 CFR 60.502(h) & (i)]
- (21) Gasoline loading shall be allowed only into tank trucks and trailers which are compatible with the terminal's vapor collection system, and which have been properly certified pursuant to 40 CFR Part 60, Appendix A, Method 27, and maintained and labeled as vapor-tight in accordance with 06-096 CMR 120. Buckeye shall record the tank truck's identification numbers, cross check it, and notify tank truck owners per 40 CFR 60.502(e). [40 CFR 60.502(e)(1)-(5), and (f), 40 CFR 60.505(a), (b) and (d)]

- (22) Any tank truck carrying gasoline or which has carried gasoline as the most recent previous load shall utilize the vapor collection system during the entire loading process. [06-09 CMR 115, BPT]
- (23) Buckeye shall prevent VOC emissions from exceeding 100% of the lower explosive limit (LEL) obtained within one inch around any potential leak source of the tank truck, including all loading couplings, vapor lines and fittings employed in the transfer of gasoline, by conducting a monthly inspection of the loading rack per 40 CFR 60.502(j). Buckeye shall keep records of the monthly inspections and maintenance records of replacement and additions of components on the vapor collection and carbon adsorption systems. [06-096 CMR 120, 40 CFR 60.502(j) and 60.505(c) & (f)]
- (24) VOC emissions from the carbon adsorption system shall not exceed 35 milligrams of VOC per litre of product transferred. If emissions exceed 10 mg/litre of product loaded, Buckeye shall take necessary action to ensure emissions do not exceed 35 mg/litre of product loaded. [06-096 CMR 115, BPT, 40 CFR 60.502(b)]
- (25) Buckeye shall conduct a compliance test of the vapor recovery unit prior to June 15, 2014 and every other year thereafter (2016, 2018, et cetera). A report containing the test results shall be submitted to the Department within 30 days of the completion of the test in accordance with the Department's stack test protocol. [06-096 CMR 115, BPT, 40 CFR 60.503]
- (26) Buckeye shall not exceed the following petroleum product throughput at the loading rack (based on a 12-month rolling total). Compliance shall be documented through records kept per Condition (18)(B).
- | | |
|---------------------|---------------------|
| 1. Gasoline/ethanol | 195,000,000 gallons |
| 2. Distillate | 125,000,000 gallons |
- [06-096 CMR 115, BPT]
- (27) Buckeye shall not exceed a product loading rate of 230,000 gallons per four (4) hour period. [06-096 CMR 115, BPT]
- (28) **Emission Limits**
- A. Buckeye shall not exceed a facility-wide emission limit of 49.9 tons per year of VOC based on a 12-month rolling total.
- B. Buckeye shall not exceed a facility-wide emission limit of 9.9 tons per year of any single HAP or 24.9 tons per year for all HAPs combined, each based on a 12-month rolling total.

(29) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 CMR 137 (as amended), the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of either:

- 1) A computer program and accompanying instructions supplied by the Department; or
- 2) A written emission statement containing the information required in 06-096 CMR 137.

The emission statement must be submitted as specified by the date in 06-096 CMR 137.

- (30) Buckeye 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 2 DAY OF December, 2014.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marie Allen Robert Curie for
PATRICIA W. AHO, COMMISSIONER

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

[Note: If a complete renewal application, as determined by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 MRSA §10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the renewal of the license.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 07/15/2013

Date of application acceptance: 07/18/2013

Date filed with the Board of Environmental Protection:

This Order prepared by N. Lynn Cornfield Bureau of Air Quality.

