

**ExxonMobil Oil Corporation
Penobscot County
Bangor, Maine
A-202-71-G-R/M (SM)**

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

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

I. REGISTRATION

A. Introduction

1. ExxonMobil Oil Corporation (EMOC) owner of the ExxonMobil Bangor Terminal located in Bangor, Maine has applied to renew their Air Emission License permitting the operation of emission sources associated with their petroleum storage and distribution facility.
2. ExxonMobil Oil Corporation has requested a minor revision be incorporated into this renewal to address the storage, transfer, and blending of ethanol.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Bulk Storage Equipment

<u>Tank Number</u>	<u>Vintage</u>	<u>Capacity (gallons)</u>	<u>Product Type</u>	<u>Roof Type</u>
Tank #9	1913	478,380	gasoline	Internal Floating Roof
Tank #11	1920	1,061,298	gasoline	Internal Floating Roof
Tank #16	1925	347,256	gasoline	Internal Floating Roof
Tank #20	1972	967,050	gasoline	Internal Floating Roof
Tank #6	1895	253,456	distillate	Cone Roof Riveted
Tank #18	1917	183,498	gasoline	Internal Floating Roof
Tank #10	1920	373,669	distillate	Cone Roof Riveted
Tank #19	1924	253,429	distillate	Cone Roof Riveted
Tank #8	1913	1,027,804	distillate	Cone Roof Riveted

All tanks listed with a product type of gasoline are also permitted to store ethanol.

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

Insignificant Activities

<u>Tank Number</u>	<u>Capacity (gallons)</u>	<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

Process Equipment

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

C. Application Classification

The application for EMOC does not include the licensing of increased permitted emissions. Therefore, the license is considered to be a renewal of current licensed emissions only and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 24, 2005). With the annual VOC emission limit listed in this license, the facility is licensed below the major source thresholds and is considered a synthetic minor.

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 (last amended December 24, 2005). 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, diesel, and heating oil have construction dates ranging from 1895 to 1972, and are therefore not subject to 40 CFR Part 60, Subparts K, Ka and Kb due to the applicability dates (constructed prior to June 11, 1973).

C. Loading Rack

The Loading Rack consists of two bays, a vapor collection system and a Vapor Recovery Unit (VRU). The Loading Rack's VRU has a maximum process capacity of 230,000 gallons per four hour period and consists of three bays. Bay #1 transfers gasoline, ethanol, and distillates, while Bay #3 transfers gasoline, ethanol, distillates, and transmix (an interface mixture of gasoline and distillate from the pipeline). The loading rack may also be used to receive shipments of denatured ethanol. The VRU is a carbon adsorption system manufactured by the John Zink Company. Emissions from the VRU are limited to 35 mg/liter of product loaded. Previous testing showed emissions less than 5 mg/liter of product loaded. EMOC is subject to 40 CFR Part 60, Subpart XX for Bulk Gasoline Terminals constructed or reconstructed after December 17, 1980.

Maine DEP conducted a streamlining analysis of the regulations in 40 CFR 60, Subpart XX and concluded that compliance with the provisions of this permit will assure compliance with the requirements of 40 CFR 60 Subpart XX.

D. VOC RACT

Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds (VOC-RACT), 06-096 CMR 134 requires facilities that have the potential to emit forty (40) tons or more of VOC per calendar year apply VOC RACT (Reasonable Available Control Technology) 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. EMOC's use of internal floating roofs for gasoline storage tanks and a vapor recovery system that is rated

at 35 mg/liter 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 Emission Restrictions

EMOC shall be restricted to the following annual emissions, based on a 12 month rolling total:

Total Allowable Annual Emission for the Facility
(used to calculate the annual license fee)

<u>Pollutant</u>	<u>Tons/Year</u>
VOC	49.9
single HAP	9.9
total HAP	24.9

III. AMBIENT AIR QUALITY ANALYSIS

According to the 06-096 CMR 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Modeling and monitoring are not required for a renewal if the total emissions of any pollutant released do not exceed the following:

<u>Pollutant</u>	<u>Tons/Year</u>
PM	25
PM ₁₀	25
SO ₂	50
NO _x	100
CO	250

Based on the above total facility emissions, EMOC is below the emissions level required for modeling and monitoring.

ORDER

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

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

The Department hereby grants Air Emission License A-202-71-G-R/M 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. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 2. pursuant to any other requirement of this license to perform stack testing.
 - B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - C. submit a written report to the Department within thirty (30) days from date of test completion.[06-096 CMR 115]

- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
- [06-096 CMR 115]
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

- (16) Tanks 9, 11, 16, 20, and 18 shall be equipped, maintained, and operated such that [06-096 CMR 111]:
- 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 leg supports or at the manufacturers recommended setting;
 - F. If any holes, tears or other openings are present the Department shall be notified within 10 days of discovery of such holes, tears, or openings and of the course of action to be taken for repair. EMOC shall demonstrate to the Department that the repairs were made as soon as practicable.
- (17) EMOC shall comply with the following source inspection requirements for Tank 9, 11, 16, 18, and 20 [06-096 CMR 111]:
- A. Routine inspections of floating roofs are 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. EMOC 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, EMOC 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.

- (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. Inspection log shall be kept documenting each inspection, any 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 seals, 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. EMOC shall take steps to assure the tank truck is connected to the vapor collection 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 +18 inches of water or a vacuum exceeding – 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 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. EMOC 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)] & (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. [06-096 CMR 115, BPT]
- (23) EMOC 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). EMOC 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 40CFR60.502 (j) and 60.505 (c) and (f)]
- (24) VOC emissions from the carbon adsorption system shall not exceed 35 milligrams of VOC per liter of product transferred. [06-096 CMR 115, BPT, 40 CFR 60.502(b)]
- (25) EMOC shall conduct a compliance test of the vapor recovery unit prior to June 15, 2009 and every other year thereafter (2011, 2013, etc.). A report containing the test results shall be submitted to the Department within 30 days of the completion of test in accordance with the Department's stack test protocol. [06-096 CMR 115, BPT, 40 CFR 60.503]
- (26) EMOC 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
- [06-96 CMR 115, BPT]
- (27) EMOC shall not exceed a product loading rate of 230,000 gallons per 4 hour period. [06-096 CMR 115, BPT]
- (28) Emission Limits
- A. EMOC shall not exceed a facility wide emission limit of 49.9 tons per year of VOC based on a 12 month rolling total. [06-096 CMR 115, BPT]
 - B. EMOC 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. [06-096 CMR 115, BPT]

(29) Annual Emission Statement

In accordance with *Emission Statements*, 06-096 CMR 137 (last amended July 6, 2004), the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

- 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.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Phone: (207) 287-2437

The emission statement must be submitted by July 1 or as otherwise specified in 06-096 CMR 137.

(30) Air Toxics Emission Statement

If EMOC exceeds the thresholds for HAPs listed in Appendix A of 06-096 CMR 137 in an inventory year, in accordance with 06-096 CMR 137 the licensee shall report, no later than July 1 every three years (2005, 2008, 2011, etc.) or as otherwise stated in 06-096 CMR 137, the information necessary to accurately update the State's toxic air pollutants emission inventory in a format prescribed by the Department containing the information required in 06-096 CMR 137.

Reports and questions should be directed to:

Attn: HAP Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Phone: (207) 287-2437 [06-096 CMR 137]

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**Departmental
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- (31) EMOC 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 DAY OF 2008.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAVID P. LITTELL, COMMISSIONER

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 10/24/07

Date of application acceptance: 11/6/07

Date filed with the Board of Environmental Protection: _____

This Order prepared by Lynn Ross, Bureau of Air Quality.