CITGO Petroleum Corporation
Cumberland County
South Portland, Maine
A-460-70-D-R

Departmental
Findings of Fact and Order
Part 70 Air Emission License

After review of the Part 70 License Renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, Section 344 and Section 590, the Department finds the following facts:

I. Registration

A. Introduction

FACILITY	CITGO Petroleum Corporation (CITGO)
LICENSE NUMBER	A-460-70-D-R
LICENSE TYPE	Part 70 License Renewal
NAICS CODES	42271
NATURE OF BUSINESS	Bulk petroleum storage and distribution
FACILITY LOCATION	102 Mechanic Street, South Portland
LICENSE ISSUANCE DATE	February 26, 2007
LICENSE EXPIRATION DATE	February 26, 2012

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

EMISSION UNIT ID	UNIT CAPACITY	UNIT TYPE
#001, Loading Rack and VCU	13,440 gal/min	loading rack and control
#004, Storage Tank No. 10	2,700,000 gallons	petroleum storage tank
#005, Storage Tank No. 7	4,200,000 gallons	petroleum storage tank
#006, Storage Tank No. 8	4,200,000 gallons	petroleum storage tank
#007, Storage Tank No. 9	2,500,000 gallons	petroleum storage tank
#008, Storage Tank No. 3	3,800,000 gallons	petroleum storage tank
#009, Storage Tank No. 4	3,800,000 gallons	petroleum storage tank
#010, Storage Tank No. 6	1,400,000 gallons	petroleum storage tank
#011, Storage Tank No. 2	4,600,000 gallons	petroleum storage tank
#012, Storage Tank No. 5	1,300,000 gallons	petroleum storage tank
#013, Storage Tank No. 1	2,800,000 gallons	petroleum storage tank
#014, Marine Vessel Loading	55,000,000 gal/yr	total petroleum vessel loading

Emission units #002 (Tank No. 1488) and #003 (Tank No. 1489) have been removed since this facility's last air emission license.

CITGO has additional insignificant activities which do not need to be listed in the emission equipment table above. The list of insignificant activities can be found in the Part 70 license application and in Appendix B of Chapter 140 of the Department's Regulations.

C. Application Classification

The application for CITGO does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be a Part 70 License Renewal issued under Chapter 140 of the Department's regulations for a Part 70 source.

II. FACILITY AND EMISSION UNIT DESCRIPTION

A. VOC RACT

Chapter 134 of the Maine Air Regulations 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. Chapter 134 VOC RACT requirements are incorporated into this Part 70 license.

In accordance with MEDEP Chapter 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. CITGO's use of cone internal floating roofs for gasoline storage tanks and a vapor collection system that is rated at 10 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.

B. Emission Unit #001, Loading Rack and Vapor Combustion Unit

A vapor combustion unit (VCU) controls the emissions from the loading rack at CITGO. The VCU is a John Zink thermal oxidizer with a process rate of 13,400 gallons per minute. This unit was installed in 1995 to replace an existing carbon absorption/adsorption system. The VCU controls emissions to less than 10 milligrams per liter of product loaded. The unit consists of 6 burners; two burners in stage 1 and four burners in stage 2. The VCU utilizes propane as a pilot and to ramp to operating temperature then fires petroleum vapors up to 5850 lb/hr.

New Source Performance Standards

CITGO is subject to 40 CFR Part 60 Subpart XX, *Standards of Performance for Bulk Gasoline Terminals*. Subpart XX requires that all affected facilities be equipment with a vapor collection system designed to collect the total organic compound vapors displaced from tank trucks during product loading. The emissions to the atmosphere from the vapor collection system are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded. CITGO is required to control emissions from the VCU to 10 milligrams per liter of gasoline loaded, thus exceeding the requirements of NSPS.

Compliance Assurance Monitoring

The VCU is used to achieve compliance with a VOC emission limit from the loading rack. Pre-control emissions from the loading rack totals greater than 50 ton/year of VOC. Therefore, the VCU is subject to 40 CFR Part 64, *Compliance Assurance Monitoring* (CAM). (§64.2)

CITGO was required to submit a CAM plan for the VCU which provided a reasonable assurance of compliance with the VOC emission limits. The CAM plan monitoring approach for the VCU included the following:

	Indicator #1
Indicator	VCU Combustion Chamber Temperatures
General Criteria	
Measurement Method	Temperature is monitored with thermocouples.
Indicator Range	Minimum temperature set points in the combustion chamber are set at 416°F before introduction of vapors is allowed. This ensures that no vapors are introduced into the VCU unless the currently permitted limit of 400 °F is reached. If the temperature drops below this threshold, the system is shut down until the problem is identified and repairs are completed. The excursion is reported.
Performance Criteria	
Data Representativeness	Thermocouples are installed at the combustion chamber per manufacturer's design. Thermocouples are accurate to within +/-3% in the range of 100 -500 °F.
QA/QC	Preventative maintenance of the VCU, including thermocouples, is performed by a qualified technician on an annual basis at a minimum.
Monitoring Frequency	Temperatures are measured and plotted continuously.
Data Collection Procedure	Temperature is plotted continuously on a electronic graph and is recorded on a electronic data recorder at intervals of once every 5 minutes.
Averaging Period	none

Streamlining

1. Opacity
   a. MEDEP Chapter 104, Section 2(A) contains an applicable opacity standard.
   b. BPT establishes an applicable opacity limit.

   CITGO accepts streamlining for the opacity limit. The BPT limit is the most stringent and is therefore the only opacity limit included in this license.

2. PM
   a. MEDEP Chapter 104, Section 2(B) contains an applicable PM emission limit.
   b. A previous BPT (A-460-70-A-I) determined that, in this case, the PM limit would be met through compliance with the facility's opacity limit.

   CITGO accepts streamlining for their PM standard. The BPT opacity limit is considered more stringent than the applicable PM standard and is therefore the limit included in this license.

3. NO_x
   BPT establishes the only applicable NO_x lb/1000 gal emission limit. **No streamlining requested.**

4. CO
   BPT establishes the only applicable CO lb/1000 gal emission limit. **No streamlining requested.**

5. VOC
   a. NSPS 40 CFR 60, Subpart XX contains an applicable VOC mg/liter of product loaded emission standard
   b. A previous BPT analysis (A-460-74-G-A/R) established an applicable VOC mg/liter of product loaded emission limit.

   CITGO accepts streamlining for their VOC mg/liter of product loaded emission limit. The BPT limit is more stringent and is therefore the only VOC mg/liter of product loaded limit included in this license.

Periodic Monitoring

Periodic monitoring shall consist of record keeping that includes records of malfunctions, failures, downtimes and regular monthly inspections of the VCU.

CITGO shall stack test the VCU for VOC mg/liter of product loaded in accordance with 40 CFR Part 60, Appendix A, by May 15th of each year.

Based on best management practices and the type of fuel for which the VCU was designed it is unlikely that the VCU will exceed the emission limits for NO_x, CO, and opacity. Therefore, periodic monitoring by the source for these pollutants is not required. However, neither the EPA nor the State is precluded from requesting CITGO to perform testing and may take enforcement action for any violations discovered.

C. Emission Units #005, #006 Units #010-#013 Storage Tanks No. 7, 1, 8, 6, 2, 5

The following distillate storage tanks are welded, white, steel tanks. Annual throughput for each tank varies depending on product and demand.

Storage Tank No.	Date of Installation	Capacity (gallons)	Control Equipment
#005, No. 7*	1965	4,200,000	Cone internal floating roof
#006, No. 8	1965	4,200,000	Fixed roof
#010, No. 6*	1974	1,400,000	Cone internal floating roof
#011, No. 2	1931	4,600,000	Fixed roof
#012, No. 5	1938	1,300,000	Fixed roof
#013, No. 1*	1947	2,800,000	Cone internal floating roof

*: Emission units #005, #010, and #013 are equipped to store gasoline, but are licensed for distillate storage as well.

Periodic Monitoring

Periodic monitoring for the distillate storage tanks shall consist of monthly visual inspections through roof hatches and around the external surface of the tank structure.

Record keeping shall consist of inspection data pertaining to routine monthly inspections, monthly throughput for each tank specifying quantity and type of product stored and average monthly product storage temperatures and maximum true vapor pressure or Reid vapor pressure, and annual VOC emissions.

When calculating annual VOC emissions, standing storage and withdrawal loss of VOCs will be calculated based on methods utilized by EPA's TANKS program and National Weather Service data for Portland, Maine.

D. Emission Units #004 - #005, Units #007 - #010 and Unit #013 Storage Tanks No. 10, 7, 9, 3, 4, 6, and 1

The following gasoline storage tanks are welded, white, steel tanks. Annual throughput varies in each tank depending on product stored, size and demand.

Storage Tank No.	Date of Installation	Capacity (gallons)	Control Equipment
#004, No. 10	1962	2,700,000	Cone internal floating roof
#005, No. 7*	1965	4,200,000	Cone internal floating roof
#007, No. 9	1966	2,500,000	Cone internal floating roof
#008, No. 3	1974	3,800,000	Cone internal floating roof
#009, No. 4	1974	3,800,000	Cone internal floating roof
#010, No. 6*	1974	1,400,000	Cone internal floating roof
#013, No. 1*	1947	2,800,000	Cone internal floating roof

*: Emission units #005, #010, and #013 are also licensed to store distillate products. CITGO will meet all of the applicable requirements for existing gasoline storage tanks while storing gasoline in these tanks.

New Source Performance Standards (NSPS)

40 CFR Part 60, Subpart K, *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978*, requires that all affected facilities equip the storage vessels with a floating roof, a vapor recovery system, or their equivalent. Records must be kept documenting the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period. Emission units #008, #009 and #010 are subject to these requirements.

Streamlining

The version of MEDEP Chapter 111 included in the approved State Implementation Plan (SIP) includes a requirement for facilities to perform a complete inspection of the cover and seal of each tank once each year. In October 1999, MEDEP submitted a formal request to EPA requesting a SIP amendment to incorporate a revised version of Chapter 111. The revision requires facilities to perform a complete inspection once every ten years. To date, EPA has not acted on this request.

A complete inspection of the tank cover and seal requires the facility to empty and degas the tank. Reducing the inspection frequency from annually to every ten years as required by EPA, reduces overall emissions of VOCs from this activity. Therefore, the requirement to perform a complete inspection every ten years is the only requirement included in this license.

Periodic Monitoring

Periodic monitoring for the gasoline storage tanks shall consist of monthly visual inspections through roof hatches and a complete inspection of the cover and seal to be performed at least once every ten years and each time the vessel is emptied and degassed according to MEDEP Chapter 111.

Record keeping shall consist of inspection data pertaining to routine monthly inspections, monthly throughput for each tank specifying quantity and type of product stored and average monthly product storage temperatures and maximum true vapor pressure or Reid vapor pressure, and annual VOC emissions.

When calculating annual VOC emissions, standing storage and withdrawal loss of VOCs will be calculated based on methods utilized by EPA's TANKS program and National Weather Service data for Portland, Maine.

E. Marine Vessel Loading

Marine vessel loading operations were installed prior to 1980 and are limited to loading 10,000,000 gallons of gasoline and 45,000,000 gallons of distillates (both based on a 12-month rolling total).

Periodic Monitoring

Periodic monitoring for the marine vessel loading operations shall consist of record keeping including records of monthly loading by product.

F. Facility Emissions

CITGO shall be limited to the following annual emissions based on a yearly (12-month rolling total) petroleum throughput not to exceed 635 million gallons of gasoline, 350 million gallons of distillate, and 590,000 gallons of additive per 12-month period (assuming all gasoline conventional) and an annual propane usage limit of 400,000 gallons per 12-month period as auxiliary fuel to the vapor combustion unit:

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

	NO_x	**CO**	**VOC**	**Total HAP**
Loading Rack	34.0	185.0	63.9	--
Storage Tanks	--	--	41.9	--
Marine Loading	--	--	9.1	--
Process Fugitives	--	--	0.3	--
Facility Wide	--	--	--	5.0
Total TPY	**34.0**	**185.0**	**115.2**	**5.0**

III. AIR QUALITY ANALYSIS

According to Chapter 140 of the Department's regulations, an existing Part 70 source shall be exempt from an impact analysis with respect to a regulated pollutant whose allowable emissions do not exceed the following:

Pollutant	Tons/year
PM	25
PM_{10}	25
SO_2	50
NO_X	100
CO	250

Based on facility license allowed emissions, CITGO 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 emissions from this sources:

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

The Department hereby grants the Part 70 License A-460-70-D-R pursuant to MEDEP Chapter 140 and the preconstruction permitting requirements of MEDEP Chapter 115 and subject to the standard and special conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to CITGO pursuant to the Department's preconstruction permitting requirements in Chapters 108 or 115 have been incorporated into this Part 70 license, except for such conditions that MEDEP has determined are obsolete, extraneous or otherwise environmentally insignificant, as explained in the findings of fact accompanying this permit.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in Chapter 115 for making such changes and pursuant to the applicable requirements in Chapter 140.

For each standard and special condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

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 STATEMENTS

(1) 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; [MEDEP Chapter 140]

(2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege; [MEDEP Chapter 140]

(3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable. [MEDEP Chapter 140]

(4) 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; [MEDEP Chapter 140]

(5) Notwithstanding any other provision 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. [MEDEP Chapter 140]

(6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:

A. Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or

B. The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or effect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in an application dated December 12-2006.

	SOURCE	CITATION	DESCRIPTION	BASIS FOR DETERMINATION
A	Facility	40 CFR Part 63, Subpart R	NESHAP for Gasoline Distribution Facilities	Facility is not major for HAPS
B	Facility	40 CFR Part 63, Subpart Y	NESHAP for Marine Tank Vessel Loading Operations	Facility is not major for HAPS and is licensed below the applicable throughput threshold
C	Facility	40 CFR Part 68	Chemical Accident Prevention Provisions	Does not apply based on EPA proposed exemption dated 4/15/96

[MEDEP Chapter 140]

(7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:

A. Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to Chapter 140;

B. Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;

C. The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or

D. The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.
[MEDEP Chapter 140]

(8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar programs or processes for changes that are provided for in the Part 70 license. [MEDEP Chapter 140]

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 and this license (Title 38 MRSA §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 140; [MEDEP Chapter 140]

(3) 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; [MEDEP Chapter 140]
Enforceable by State-only

(4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.

(5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions; [MEDEP Chapter 140]
Enforceable by State-only

(6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license; [MEDEP Chapter 140]

(7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, 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 the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license. [MEDEP Chapter 140]

(8) 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 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;

2. to demonstrate compliance with the applicable emission standards; or

3. 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.

[MEDEP Chapter 140]
Enforceable by State-only

(9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates 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.

[MEDEP Chapter 140]
Enforceable by State-only

(10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.

A. The licensee shall notify the Commissioner within 48 hours of a violation of any emission standard and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;

B. The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 MRSA § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

C. All other deviations shall be reported to the Department in the facility's semiannual report.

[MEDEP Chapter 140]

(11) Upon the written request of 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 manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [MEDEP Chapter 140]

(12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official. [MEDEP Chapter 140]

(13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:

(a) The identification of each term or condition of the Part 70 license that is the basis of the certification;

(b) The compliance status;

(c) Whether compliance was continuous or intermittent;

(d) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and

(e) Such other facts as the Department may require to determine the compliance status of the source;

[MEDEP Chapter 140]

SPECIAL CONDITIONS

(14) **Loading Rack and Vapor Combustion Unit, Emission Unit #001**

A. Emissions from the VCU shall be limited to the following:

Pollutant	lb/1000 gal[a]	Origin and Authority	Enforceability
NO_X	0.0334	A-460-70-A-I (4/9/02), BPT	**Enforceable by State-only**
CO	0.0835	A-460-70-A-I (4/9/02), BPT	**Enforceable by State-only**

[a] based on lb per 1000 gallons of product loaded

B. The bulk gasoline terminal shall be equipped and maintained with a vapor combustion system that captures displaced VOC vapors whenever gasoline is being transferred to a tank truck. [MEDEP, Chapter 112]

C. 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. [MEDEP Chapter 112 and Chapter 120]

D. Gasoline loading shall be allowed only into tank trucks and trailers 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 Maine Air Regulations Chapter 120. [MEDEP, Chapter 120]

E. 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. [A-460-74-G-A/R (7/25/95), BPT]

F. 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, are prohibited. [MEDEP Chapter 120]

G. VOC emissions from the thermal oxidizer shall not exceed 10 milligrams of VOC per liter of product transferred. Compliance with these standards shall be determined by methods promulgated in 40 CFR Part 60.503 or other methods approved by the Department and EPA. [A-460-74-G-A/R (7/25/95), BPT]

H. The vapor combustion system shall operate so as not to allow product to commence loading at the racks until the system has reached the minimum

operating temperature of 400°F. This operating temperature shall be verified in subsequent annual compliance tests and modified through an amendment to the license, if needed, to ensure continued compliance with the emission limit of 10 mg/liter of product loaded. [A-460-71-K-M (8/12/97), BPT]

I. CITGO shall conduct an annual VOC compliance test for the VCU prior to May 15th of each year. A report containing test results shall be submitted to the Department within 30 days of testing according the requirements of the Department's stack test protocol. [A-460-74-G-A/R (7/25/95), BPT]

J. CITGO shall not exceed a petroleum product throughput at the loading rack as follows (based on a 12-month rolling total): [A-460-70-A-I (4/9/02), BPT]

1. gasoline: 635,000,000 gallons
2. distillate 350,000,000 gallons
3. additive 590,000 gallons

K. CITGO shall not exceed a product loading rate of 13,440 gallons per minute. [A-460-74-G-A/R (7/25/95), BPT]

L. CITGO shall not exceed an annual propane use of 400,000 gallons per 12-month period as auxiliary fuel to the vapor combustion unit. [A-460-74-I-M (4/19/96), BPT]

M. Visible emissions from the VCU shall not exceed 5% opacity based on a six (6) minute block average basis. [A-460-70-A-I (4/9/02), BPT]

O. CITGO shall not exceed an emission limit of115.2 tons per year of VOC based on a 12 month rolling total demonstrated by the recordkeeping requirements listed in Condition (20). [A-460-71-J-A (9/24/96), BPT]

P. CITGO shall conduct a leak (defined as 21,000 ppm as propane or the equivalent) inspection of all equipment at the loading rack and the VCU, utilizing sight, sound and smell at a minimum of once per month. All leaks must be repaired as quickly as possible, but within 15 calendar days, with the first attempt at repair made no later than 5 days from the initial detection of the leak. [A-460-74-G-A/R (7/25/95), BPT]

Q. The following records shall be maintained at the source and available for inspection by the Department:
1. Inspection log documenting routine leak inspections to include date of detection, nature of the leak and detection method, dates of repair attempts and methods used, details of any delays in repairs and the final date of repair.

2. Log of all repairs, malfunctions, and downtimes for the VCU.
3. Log documenting each propane delivery.
4. Data obtained from the CMS documenting temperature of the VCU and loading profile.
5. Monthly throughput records for each product stored.

[A-460-70-A-I (4/9/02) and MEDEP Chapter 140, BPT]

(15) **Compliance Assurance Monitoring**

A. VOC CAM for the VCU [40 CFR Part 64]

Condition	**Indicator #1: Catalytic Incinerator Combustion Chamber Temperature**
1. Measurement Method	CITGO shall monitor the VCU combustion chamber temperature with a thermocouple.
2. Indicator Range	The VCU combustion chamber temperature shall be maintained above 416°F. If the temperature drops below this threshold, it is considered an excursion and the system is shut down until the problem is identified and repairs are completed. The excursion is reported.
3. Data Representativeness	The thermocouple shall be installed in the combustion chamber per manufacturer's design. Thermocouple shall be accurate within ±3% in the range of 100-500°F.
4. QA/QC	Preventative maintenance of the VCU, including thermocouples, shall be performed by a qualified technician on an annual basis.
5. Monitoring Frequency	CITGO shall measure the VCU combustion chamber temperature continuously.
6. Data Collection Procedure	Temperature shall be plotted continuously on an electronic graph and recorded on an electronic data recorder once per 5 minutes.
7. Averaging Period	none

B. CITGO shall operate and monitor the VCU within the ranges established by their CAM plan. Prior to making any changes to the approved CAM plan, CITGO shall notify the Department and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. [40 CFR 64.7.e]

C. Upon detecting an excursion, CITGO shall restore normal operation of the control equipment as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. [40 CFR 64.7.d]

D. In addition to the requirements of Standard Condition (10), any excursions shall be reported on semiannual reports. If excursions occur, CITGO must also certify intermittent compliance with the emission limits for the control device monitored on their annual compliance certification. [40 CFR 64]

(16) Distillate Storage Tanks, Emission Units #005, #006, and Units #010-#013

A. CITGO shall conduct routine inspections of the distillate tanks at a minimum of once every month around the perimeter of the tank and roof. [A-460-70-A-I (4/9/02), BPT]

B. The following records shall be maintained at the source and available for inspection by the Department:
1. Inspection log documenting any detected leaks, holes, tears, or other openings and the corrective action taken. [A-460-70-A-I (4/9/02), BPT]
2. Monthly throughput specifying quantity and types of volatile petroleum liquids in each tank and the period of storage. [A-460-70-A-I (4/9/02), BPT]
3. Calculations showing annual VOC emissions from equipment seals, and transfer piping and fittings determined in accordance with American Petroleum Institute, Manual of Petroleum Measurement Standard, Chapter 19, Section 2, Evaporative Loss from Floating Roof Tanks (method of calculating VOC emission from tanks). [A-460-70-A-I (4/9/02), BPT]

(17) Gasoline Storage Tanks, Emission Units #004 - #005, Units #007 - #010 and Unit #013

The following requirements apply to each of the above listed storage tanks individually, unless otherwise noted.

A. All gasoline storage tanks shall be equipped, maintained, and operated such that:
1. 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; [ME DEP, Chapter 111]
2. 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; [ME DEP, Chapter 111]

3. All storage tank openings, except stub drains, are equipped with covers, lids or seals which remain closed at all times; [ME DEP, Chapter 111]
4. All automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; [ME DEP, Chapter 111]
5. 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; [ME DEP, Chapter 111]
6. If any holes, tears, or other openings are present the source shall notify the Department in writing within 10 days of discovery of such holes, tears or other openings and the course of action to be taken for repair. The licensee shall demonstrate to the Department that all repairs were made as soon as practicable, but no later than 30 calendar days from detection. If such holes, tears or other openings are detected between June 1 and August 31, the licensee may contact the Department to request flexibility in order to make repairs outside the period restricting the emptying and degassing of tanks. [A-460-74-G-A/R (7/25/95) & A-460-70-A-I (4/9/02), BPT]

B. CITGO shall comply with the following source inspection requirements: [ME DEP, Chapter 111]
   1. Routine inspections of floating roofs are conducted through roof hatches once every month.
   2. 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.
   3. CITGO shall not empty and degas any storage tank for the purpose of performing a complete inspection between June 1 and August 31 of each calendar year.

C. The following records shall be maintained at the source and available for inspection by the Department:
   1. Inspection log documenting routine monthly inspections of floating roof covers and seals, including LEL readings from such inspections, which are to include notification and explanation of any excessive increases in LEL readings as compared to normal operating conditions. [A-460-74-G-A/R (7/25/95), BPT]
   2. Inspection log documenting all complete inspections of cover and seal to be performed whenever the tank is emptied and degassed, at a minimum of once every ten years. [ME DEP, Chapter 111]
   3. Inspection log documenting any detected leaks, holes, tears, or other openings and the corrective action taken. [ME DEP, Chapter 140, BPT]

4. Monthly throughput specifying quantity and types of volatile petroleum liquids in each tank and the period of storage. [ME DEP, Chapter 111]
5. Average monthly product storage temperatures and maximum true vapor pressures or Reid vapor pressures of volatile petroleum liquids stored. [ME DEP, Chapter 111]
6. Calculations showing annual VOC emissions from equipment seals, and transfer piping and fittings determined in accordance with American Petroleum Institute, Manual of Petroleum Measurement Standard, Chapter 19, Section 2, Evaporative Loss from Floating Roof Tanks (method of calculating VOC emission from tanks). [A-460-70-A-I (4/9/02), BPT]

D. Emission units #005 (Tank #7), #010 (Tank #6), and #013 (Tank #1) will be a dual storage tanks. These tanks are equipped to store gasoline, however, typical storage will be distillate. Therefore, CITGO shall comply with all requirements, as applicable, for storage of gasoline whenever these tanks are put into gasoline service. No notification to the Department is required when products are switched. CITGO shall maintain records as stated above in condition (16) and (17)(A), (B) and (C).
[MEDEP Chapter 140, BPT]

(18) Marine Vessel Loading Dock

A. CITGO shall not exceed a petroleum product throughput of 10,000,000 gallons of gasoline and 45,000,000 of distillate products (based on a 12-month rolling total) through the marine vessel loading dock. [A-460-70-A-I (4/9/02), BPT]

B. CITGO shall conduct routine inspections of piping and transfer lines at a minimum of once every month. [A-460-70-A-I (4/9/02), BPT]

C. The following records shall be maintained at the source and available for inspection by the Department:
1. Inspection log documenting routine monthly inspections of piping and transfer lines to include any leaks and the schedule for repair. [A-460-70-A-I (4/9/02), BPT]
2. Monthly throughput specifying quantity and types of volatile petroleum liquids transferred. [A-460-70-A-I (4/9/02), BPT]

(19) The total annual emissions from CITGO shall not exceed the following, based on a 12 month rolling total [MEDEP Chapter 140, BPT]:

Pollutant	**TPY**
PM	negligible
PM_{10}	negligible
SO_2	negligible
NO_X	34.0
CO	185.0
VOC	115.2
Total HAPs	5.0

(20) **Monitoring and Recordkeeping Requirements**
[MEDEP Chapters 140, 117, and 122]

A. The following are identified as Periodic Monitors:
1. VCU combustion chamber temperature;
2. Quantity and type of petroleum liquid stored in each tank;
3. Reid vapor pressure of all product stored;
4. Maximum true vapor pressure of all product stored;
5. Average storage temperature;
6. Average throughput in each tank;
7. Petroleum throughput from marine vessel loading operations;
8. Tank emissions calculated using EPA TANKS program;
9. Tank truck emissions assuming 1.3% of the vapors are displaced during loading (based on assumed capture efficiency of 98.7% as given in 40 CFR Part 63, Subpart R);
10. Marine vessel loading assuming 1.8 lb VOC/1000 gallons for gasoline and 0.006 lb VOC/1000 gallons for distillate as specified in US EPA's AP-42;
11. HAP speciation data;
12. Records of all monthly inspections and leak inspections of all equipment, utilizing sight, sound and smell.

B. The following are identified as CAM monitors [40 CFR Part 64]:

1. VCU combustion chamber temperature.

(21) **Semiannual Reporting**

The licensee shall submit semiannual reports every six months to the Bureau of Air Quality. The semiannual reports are due on July 31st and Jan 31st of each year. The semiannual report shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the DEP within seven calendar days of the due date.

A. Each semiannual report shall include a summary of the periodic monitoring required by this license.

B. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.
[MEDEP Chapter 140]

(22) **Annual Compliance Certification**

CITGO shall submit an annual compliance certification to the Department in accordance with Standard Condition (13) of this license. The initial annual compliance certification is due January 31 of each year.

The annual compliance certification shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the DEP within seven calendar days of the due date. Certification of compliance is to be based on the stack testing or monitoring data required by this license. Where the license does not require such data, or the license requires such data upon request of the Department and the Department has not requested the testing or monitoring, compliance may be certified based upon other reasonably available information such as the design of the equipment or applicable emission factors. [MEDEP Chapter 140]

(23) **Annual Emission Statement**

In accordance with MEDEP Chapter 137, the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

A. A computer program and accompanying instructions supplied by the Department;

or

B. A written emission statement containing the information required in MEDEP Chapter 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 no later than July 1 or as otherwise specified in Chapter 137.

[MEDEP Chapter 137]

(24) **Air Toxics Emissions Statement**

If CITGO exceeds the thresholds for HAPs listed in Appendix A of MEDEP Chapter 137 in an inventory year, in accordance with MEDEP Chapter 137 the licensee shall report, no later than July 1 every three years (2005, 2008, 2011, etc.) or as otherwise stated in Chapter 137, the information necessary to accurately update the State's toxic air pollutants emission inventory by means of a computer program supplied by the Department or a written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

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

Phone: (207) 287-2437

[MEDEP Chapter 137]

(25) **General Applicable State Regulations**

The licensee is subject to the State regulations listed below.

Origin and Authority	Requirement Summary	Enforceability
Chapter 102	Open Burning	-
Chapter 109	Emergency Episode Regulation	-
Chapter 110	Ambient Air Quality Standard	-
Chapter 116	Prohibited Dispersion Techniques	-
38 M.R.S.A. §585-B, sub-§5	Mercury Emission Limit	Enforceable by State-only

(26) **Units Containing Ozone Depleting Substances**

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. An example of such units include refrigerators and any size air conditioner that contain CFCs.
[40 CFR, Part 82, Subpart F]

(27) **Asbestos Abatement**

When undertaking Asbestos abatement activities, CITGO shall comply with the Standard for Asbestos Demolition and Renovation 40 CFR Part 61, Subpart M.

(28) **Certification by a Responsible Official**

All reports (including quarterly reports, semiannual reports, and annual compliance certifications) required by this license to be submitted to the Bureau of Air Quality must be signed by a responsible official. [MEDEP Chapter 140]

(29) **Annual Fee**

CITGO shall pay the annual air emission license fee within 30 days of December 31st of each year. Pursuant to Title 38-353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under section 341-D, subsection 3.

(30) **Expiration of a Part 70 license**

CITGO shall submit a complete Part 70 renewal application at least 6 months prior, but no more than 18-months prior, to the expiration of this air license. Pursuant to Title 5 MRSA §10002, all terms and conditions of the Part 70 license shall remain in effect until the Department takes final action on the renewal of the Part 70 license. An existing source submitting a complete renewal application under Chapter 140 prior to the expiration of the Part 70 license will not be in violation of operating without a Part 70 license. [MEDEP Chapter 140]

(31) **New Source Review**

CITGO is subject to all previous New Source Review (NSR) requirements summarized in this Part 70 air emissions license and they shall remain in effect even if this Chapter 140 Air Emissions License, A-460-70-D-R, expires.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2007.

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: 12/14/06
Date of application acceptance: 12/15/06

Date filed with the Board of Environmental Protection: _____

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