



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

DEPARTMENT ORDER

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

**Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal**

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

FACILITY	CITGO Petroleum Corporation
LICENSE TYPE	Part 70 License Renewal
NAICS CODES	424710
NATURE OF BUSINESS	Bulk Petroleum Storage and Distribution
FACILITY LOCATION	102 Mechanic Street, South Portland

CITGO Petroleum Corporation (CITGO) is a bulk petroleum storage and distribution facility consisting of petroleum storage tanks, a loading rack with a vapor combustion unit (VCU) for controlling emissions while filling tank trucks, and the capacity to load marine vessels.

CITGO has the potential to emit more than 50 tons per year (tpy) of volatile organic compounds (VOC). Therefore, the source is classified as a major source for criteria pollutants.

Due to the restrictions on product throughput levels and the facility's annual emission limit on hazardous air pollutants (HAP) contained in this license, CITGO does not have the potential to emit 10 tpy or more of a single HAP or 25 tpy or more of combined HAP. Therefore, the source is classified as an area source for HAP.

B. Emission Equipment

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

Processes

Equipment	Capacity	Pollution Control Equipment
Loading Rack	13,440 gal/min	Vapor Combustion Unit
Marine Vessel Loading Dock	13,440 gal/min	

Petroleum Storage Internal Floating Roof Tanks

Equipment	Capacity (gallons)	Products Stored	Install Date
Tank #1	2,800,000	gasoline, ethanol,	1947
Tank #6	1,400,000	gasoline/ethanol blend,	1974
Tank #7	4,200,000	distillate oil, jet fuel, kerosene	1965
Tank #3	3,800,000		1974
Tank #4	3,800,000	gasoline, ethanol,	1974
Tank #9	2,500,000	gasoline/ethanol blend	1966
Tank #10	2,700,000		1962

Petroleum Storage Fixed Roof Tanks

Equipment	Capacity (gallons)	Products Stored	Install Date
Tank #2	4,600,000		1931
Tank #5	1,300,000	distillate oil, jet fuel, kerosene	1938
Tank #8	4,200,000		1965

CITGO has additional activities which are insignificant and do not need to be listed in the emission equipment tables above. The list of insignificant activities can be found in the Part 70 license application and in Appendix B of *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140.

C. Acronyms and Units of Measure

ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BPT	Best Practical Treatment
C.F.R.	Code of Federal Regulations
C.M.R.	Code of Maine Rules
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emissions Monitoring System
CMS	Continuous Monitoring System
CO	Carbon Monoxide
CO ₂ e	Carbon Dioxide equivalent
COMS	Continuous Opacity Monitoring System
CPMS	Continuous Parameter Monitoring System
EPA or US EPA	United States Environmental Protection Agency
gal/day	gallons per day
gal/hr	gallons per hour
gal/year	gallons per year
GHG	Greenhouse Gases
HAP	Hazardous Air Pollutants
IFR	Internal Floating Roof
lb	pounds
lb/1,000 gal	pounds per thousand gallons
lb/hr	pounds per hour
lb/MMBtu	pounds per million British Thermal Units
LEL	Lower Explosive Limit
m ³	cubic meters
M.R.S.	Maine Revised Statutes
mg/liter	milligrams per liter
MMBtu	Million British Thermal Units
MMBtu/hr	million British Thermal Units per hour
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
PM	Particulate Matter less than 100 microns in diameter
PM ₁₀	Particulate Matter less than 10 microns in diameter
PM _{2.5}	Particulate Matter less than 2.5 microns in diameter

PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SO ₂	Sulfur Dioxide
TOC	Total Organic Compounds
tpy	tons per year
VCU	Vapor Combustion Unit
VOC	Volatile Organic Compounds
VOL	Volatile Organic Liquid

D. Definitions

Degassing or Degassing Event means the process of removing organic vapors from a petroleum storage tank during or in preparation for human entry, cleaning, and/or maintenance activity

Distillate Oil means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blend, as defined in ASTM D7467.

Equipment in gasoline service means each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in the gasoline liquid transfer and vapor collection systems used in a system that transfers gasoline or gasoline vapors. This definition also includes the entire vapor processing system except the exhaust port or stack.

Ethanol means fuel ethanol intended for blending with gasoline the complies with the specifications in ASTM D4806.

Gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines.

Internal Floating Roof (IFR) Tank means an aboveground petroleum storage tank with both a permanent fixed roof and a second roof designed to float on the surface of the stored liquid. Pursuant to this definition, Tanks #1, #3, #4, #6, #7, #9, and #10 are IFR tanks.

Jet fuel means aviation turbine fuel that complies with the specifications in ASTM D1655.

Kerosene means a petroleum product that complies with the specifications in ASTM D3699.

Marine vessel means any watercraft, including oil tankers and barges, used as a means of transportation to carry petroleum products over water.

Open-ended valve or line means any valve, except safety relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

Portable or Non-Road Engine means an internal combustion engine which is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

An engine is not a non-road (portable) engine if it remains or will remain at a location for more than 12 consecutive months or for a shorter period of time if sited at a seasonal source. A seasonal source is a source that remains in a single location for two years or more and which operates for fewer than 12 months in a calendar year. If an engine operates at a seasonal source for one entire season, the engine does not meet the criteria of a non-road (portable) engine and is subject to applicable stationary engine requirements.

Records or Logs mean either hardcopy or electronic records.

E. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

The application for 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 *Part 70 Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 140.

F. Facility Description

CITGO operates a bulk petroleum storage and distribution facility consisting of petroleum storage tanks, a loading rack with vapor combustion unit for controlling emissions while filling tank trucks, and the capacity to load marine vessels.

Petroleum products, including gasoline, ethanol, gasoline/ethanol blend, distillate oil, jet fuel, and kerosene are received at the facility primarily by marine vessel. These products are stored in the facility's ten aboveground petroleum storage tanks. Three of the petroleum storage tanks are fixed roof tanks licensed to store only distillate oil, jet fuel, and kerosene. The other seven tanks have internal floating roofs and are licensed to store gasoline, ethanol, gasoline/ethanol blend, as well as distillate oil, jet fuel, and kerosene. Petroleum product additives are also stored on-site in tanks that are considered insignificant activities due to their size and the vapor pressure of the product stored.

At the facility's loading rack, CITGO transfers the stored petroleum products to tank trucks for distribution. Vapors displaced from tank trucks being loaded are controlled by a vapor combustion unit (VCU). Pursuant to both State and Federal regulations described later in this license, CITGO is classified as a bulk gasoline terminal because the facility has a daily gasoline throughput greater than 20,000 gallons per day.

CITGO is also licensed to transfer stored product back to marine vessels. Vapors displaced from the loading of product into marine vessels are also controlled by the VCU associated with the Loading Rack.

G. General Facility Requirements

CITGO is subject to the state and federal regulations listed below in addition to the regulations listed for specific units as described further in this license.

Citation	Requirement Title
06-096 C.M.R. ch. 101	Visible Emissions Regulation
06-096 C.M.R. ch. 102	Open Burning
06-096 C.M.R. ch. 103	Fuel Burning Equipment Particulate Emission Standard
06-096 C.M.R. ch. 106	Low Sulfur Fuel Regulation
06-096 C.M.R. ch. 109	Emergency Episode Regulations
06-096 C.M.R. ch. 110	Ambient Air Quality Standards
06-096 C.M.R. ch. 111	Petroleum Liquid Storage Vapor Control
06-096 C.M.R. ch. 112	Bulk Terminal Petroleum Liquid Transfer Requirements
06-096 C.M.R. ch. 116	Prohibited Dispersion Techniques
06-096 C.M.R. ch. 120	Gasoline Tank Truck Tightness Self-Certification
06-096 C.M.R. ch. 134	Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds
06-096 C.M.R. ch. 137	Emission Statements
06-096 C.M.R. ch. 140	Part 70 Air Emission License Regulations
06-096 C.M.R. ch. 143	New Source Performance Standards
06-096 C.M.R. ch. 144	National Emission Standards for Hazardous Air Pollutants
06-096 C.M.R. ch. 170	Degassing of Petroleum Storage Tanks, Marine Vessels, and Transport Vessels

Citation	Requirement Title
06-096 C.M.R. ch. 171	Control of Petroleum Storage Facilities
40 C.F.R. Part 60, Subpart A	General Provisions
40 C.F.R. 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
40 C.F.R. Part 60, Subpart XX	Standards of Performance for Bulk Gas Terminals
40 C.F.R. Part 63, Subpart A	General Provisions
40 C.F.R. Part 63, Subpart Y	National Emission Standards for Marine Tank Vessel Loading Operations
40 C.F.R. Part 63, Subpart WW	National Emission Standards for Storage Vessels (Tanks) – Control Level 2
40 C.F.R. Part 63, Subpart BBBBB	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities
40 C.F.R. Part 70	State Operating Permit Programs

II. BEST PRACTICAL TREATMENT (BPT) AND EMISSION STANDARDS

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 C.M.R. ch. 100. 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. NO_x RACT (Reasonably Available Control Technology)

Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides, 06-096 C.M.R. ch. 138 (NO_x RACT) is applicable to sources that have the potential to emit quantities of NO_x equal to or greater than 100 tons/year. CITGO's potential to emit NO_x is less than 100 tpy. Therefore, 06-096 C.M.R. ch. 138 does not apply to this source.

C. VOC RACT (Reasonably Available Control Technology)

Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds, 06-096 C.M.R. ch. 134 (VOC RACT) is applicable to sources that have the potential to emit quantities of VOC equal to or greater than 40 tons/year from non-exempt equipment.

Pursuant to 06-096 C.M.R. ch. 134 § 3(A)(1), Option A, CITGO operates and maintains internal floating roofs for gasoline storage tanks and a vapor collection and control system that is designed to control VOC emissions to a level of no more than 10 mg/liter of product loaded. This equipment controls VOC emissions such that the total VOC emissions do not exceed, on a daily basis, 15% of the uncontrolled daily VOC emissions. The VOC RACT requirements are incorporated in this renewal.

D. Mandatory Greenhouse Gas (GHG) Reporting

Federal regulation *Mandatory Greenhouse Gas Reporting*, 40 C.F.R. Part 98, is applicable to some facilities as addressed in *General Provisions, Who must report?*, 40 C.F.R. § 98.2. These are not considered “applicable requirements” for the purposes of Part 70 licenses. Therefore, this information is presented for informational purposes only.

E. Compliance Assurance Monitoring (CAM)

Compliance Assurance Monitoring, 40 C.F.R. Part 64 is applicable to units at major sources if the unit has emission limits, a control device to meet the limits, and pre-control emissions greater than 100% of the major source threshold (50 tpy for VOC and 100 tpy for any other pollutant).

Although the floating roofs on the petroleum storage tanks are intended to limit emissions of VOC, they are considered passive control measures that do not meet the definition of *control device* contained in 40 C.F.R. Part 64.1, shown below (emphasis added).

Control device means equipment, other than inherent process equipment, that is used to destroy or remove air pollutant(s) prior to discharge to the atmosphere. The types of equipment that may commonly be used as control devices include, but are not limited to, fabric filters, mechanical collectors, electrostatic precipitators, inertial separators, afterburners, thermal or catalytic incinerators, adsorption devices (such as carbon beds), condensers, scrubbers (such as wet collection and gas absorption devices), selective catalytic or non-catalytic reduction systems, flue gas recirculation systems, spray dryers, spray towers, mist eliminators, acid plants, sulfur recovery plants, injection systems (such as water, steam, ammonia, sorbent or limestone injection), and combustion devices independent of the particular process being conducted at an emissions unit (e.g., the destruction of emissions achieved by venting process emission

streams to flares, boilers or process heaters). For purposes of this part, a control device does not include passive control measures that act to prevent pollutants from forming, such as the use of seals, lids, or roofs to prevent the release of pollutants, use of low-polluting fuel or feedstocks, or the use of combustion or other process design features or characteristics. If an applicable requirement establishes that particular equipment which otherwise meets this definition of a control device does not constitute a control device as applied to a particular pollutant-specific emissions unit, then that definition shall be binding for purposes of this part.

The Loading Rack is subject to an emission standard, utilizes a control device to meet that standard, and has pre-control emissions of greater than 50 tpy of VOC. However, 40 C.F.R. § 64.2(b)(1)(i) specifies the exemption from specific CAM requirements for any emission unit subject to emission limitations or standards in a NSPS or NESHAP regulation proposed by the Administrator after November 15, 1990. The Loading Rack is subject to an emission standard pursuant to 40 C.F.R. Part 63, Subpart BBBBBB, a regulation proposed after 1990.

Therefore, there are no units at this facility subject to CAM requirements.

F. 40 C.F.R. Part 63, Subpart BBBBBB

CITGO is subject to the *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities*, 40 C.F.R. Part 63, Subpart BBBBBB. The facility is considered an existing bulk gasoline terminal that is not subject to *National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)*, 40 C.F.R. Part 63, Subparts R, or *National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries*, 40 C.F.R. Part 63, Subpart CC. The Loading Rack is a bulk gasoline terminal loading rack with a throughput greater than 250,000 gal/day.

The affected source under 40 C.F.R. Part 63, Subpart BBBBBB, includes any of the facility that is part of a bulk gasoline terminal including gasoline storage tanks, gasoline loading racks, gasoline cargo tanks (tank trucks), and any equipment in gasoline service. [40 C.F.R. § 63.11082(a)] Accordingly, this regulation contains applicable requirements for both the Loading Rack and the IFR petroleum storage tanks storing gasoline, including gasoline blended with ethanol. This regulation is not applicable to tanks which store distillate fuel or ethanol which has not been blended with gasoline because neither distillate fuel nor ethanol alone meet the definition of *gasoline* in this subpart.

CITGO shall continuously comply with all applicable requirements of the most current version of 40 C.F.R. Part 63, Subpart BBBBBB as described below. Should EPA adopt changes to this regulation that results in new or modified applicable requirements, CITGO shall apply to reopen this air emission license to update the applicable requirements within 60 days of publication of the final rule in the Federal Register.

1. General Requirements

- a. CITGO must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require CITGO to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.11085(a)]
- b. CITGO shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
 - (1) Minimize gasoline spills;
 - (2) Clean up spills as expeditiously as practicable;
 - (3) Cover all open gasoline containers and gasoline storage tank fill-pipes with a gasketed seal when not in use; and
 - (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

[40 C.F.R. § 63.11085(b)]

2. Emission Limits and Management Practices for Storage Tanks

Tanks #1, #3, #4, #6, #7, #9, and #10 are IFR storage tanks with capacity greater than 151 m³ (39,890 gallons) each. They are subject to the following requirements when storing gasoline.

- a. The IFR tanks must be equipped and operated pursuant to 40 C.F.R. §§ 63.1063(a)(1) and (b), except for the secondary seal requirements under §§ 63.1063(a)(1)(i)(C) and (D), as described below. [40 C.F.R. Part 63, Subpart BBBBBB, Table 1, Row 2(e)]
 - (1) Each IFR shall be equipped with either a liquid-mounted seal or a mechanical shoe seal. [40 C.F.R. § 63.1063(a)]
 - (2) Each IFR shall float on the stored liquid surface at all times, except when the floating roof is supported by its leg supports or other support devices. [40 C.F.R. § 63.1063(b)(1)]

- (3) When an IFR is storing liquid, but the liquid depth is insufficient to float the floating roof, the process of filling to the point of refloating the IFR shall be continuous and shall be performed as soon as practical. [40 C.F.R. § 63.1063(b)(2)]
- (4) Each cover over an opening in an IFR, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall be closed at all times, except when the cover must be open for access. [40 C.F.R. § 63.1063(b)(3)]
- (5) Each automatic bleeder vent (vacuum breaker vent) and rim space vent shall be closed at all times, except when required to be open to relieve excess pressure or vacuum, in accordance with the manufacturer's design. [40 C.F.R. § 63.1063(b)(4)]
- (6) Each unslotted guidepole cap shall be closed at all times except when gauging the liquid level or taking liquid samples. [40 C.F.R. § 63.1063(b)(5)]

b. No later than May 8, 2027, CITGO shall equip, maintain, and operate each IFR control system to maintain the vapor concentration within the storage tank above the floating roof at or below 25% of the lower explosion limit (LEL) on a 5-minute rolling average basis without the use of purge gas. [40 C.F.R. § 63.11083(d)(2) and Table 1, Row 2(f)]

3. Emission Limits and Management Practices for the Loading Rack

The Loading Rack is a bulk gasoline terminal loading rack with a throughput greater than 250,000 gal/day subject to the following requirements:

- a. CITGO shall equip the Loading Rack with a vapor collection system designed to collect the total organic compound (TOC) vapors displaced from cargo tanks during product loading.
- b. Until May 8, 2027, CITGO shall reduce emissions of TOC to less than or equal to 80 mg/l of gasoline loaded into gasoline cargo tanks at the loading rack.

Note: This standard has been streamlined to the more stringent standard of 35 mg/l of product transferred contained in 40 C.F.R. Part 60, Subpart XX and 06-096 C.M.R. ch. 112, and only the more stringent standard is included in the Order section of this license.

No later than May 8, 2027, CITGO shall reduce emissions of TOC to less than or equal to 35 mg/l of gasoline loaded into gasoline cargo tanks at the loading rack.

- c. CITGO shall operate the vapor collection system to prevent any TOC vapors collected at one loading lane from passing through another lane to the atmosphere.

- d. Until May 8, 2027, CITGO shall limit the loading of gasoline into gasoline cargo tanks that are vapor tight using the procedures specified in 40 C.F.R. §§ 60.502(e) through (j).
- e. No later than May 8, 2027, CITGO shall use the procedures specified in 40 C.F.R. §§ 63.11092(g) and (h) to load liquid product into gasoline cargo tanks.

[40 C.F.R. Part 63, Subpart BBBB, Table 2]

4. Testing Requirements

In lieu of the performance test required by 40 C.F.R. § 63.11092(a)(1), CITGO has submitted a statement certifying the compliance status of the Loading Rack as permitted pursuant to 40 C.F.R. § 63.11092(a)(2).

A previously conducted performance test may be used to satisfy the requirements of 40 C.F.R. § 63.11092(e)(1) provided the requirements of 40 C.F.R. § 63.11092(e)(1)(i) through (v) are met.

5. Continuous Monitoring System (CMS)

CITGO has chosen to comply with the monitoring option listed in 40 C.F.R. § 63.11092(b)(1)(iii)(B) as described below.

- a. CITGO shall install, calibrate, certify, operate, and maintain a CMS for the Vapor Combustion Unit (VCU). The CMS shall be continuously operated whenever gasoline vapors are displaced to the VCU. [40 C.F.R. § 63.11092(b)]
- b. CITGO shall measure the presence of pilot flame in the VCU. The photo-eye shall send a positive parameter value to indicate that the pilot flame is on, or a negative parameter value to indicate that the pilot flame is off.
[40 C.F.R. § 63.11092(b)(1)(iii)(B)(1)]
- c. CITGO shall develop and maintain a monitoring and inspection plan to meet the requirements of 40 C.F.R. § 63.11092(b)(1)(iii)(B)(2).
[40 C.F.R. § 63.11092(b)(1)(iii)(B)(2)]
- d. CITGO shall not operate the VCU when presence of pilot flame is not indicated by the CMS. [40 C.F.R. § 63.11092(d)(1)]
- e. Operation of the VCU when presence of pilot flame is not indicated by the CMS shall constitute a violation of the emission standard in Table 1. [40 C.F.R. § 63.11092(d)(3)]

6. Storage Tank Inspections

a. CITGO shall perform inspections of the IFR systems according to the requirements of 40 C.F.R. § 63.1063(c)(1) as described below. [40 C.F.R. § 63.11092(f)(1)(i)]

(1) At least once per year, CITGO shall perform a tank-top inspection of each IFR by visually inspecting the floating roof deck, deck fittings, and rim seal through openings in the fixed roof. [40 C.F.R. § 63.1063(c)(1)(i)(A) and § 63.1063(d)(2)]

Note: The requirement for annual inspections has been streamlined to the more stringent requirement for monthly inspections contained in 06-096 C.M.R. ch. 111.

(2) Each time an IFR storage vessel is completely emptied and degassed, or every 10 years, whichever occurs first, CITGO shall perform an inspection by visually inspecting the floating roof deck, deck fittings, and rim seals from within the storage vessel. The inspection may be performed entirely from the top side of the floating roof, as long as there is visual access to all deck components as specified in 40 C.F.R. § 63.1063(a). [40 C.F.R. § 63.1063(c)(1)(i)(B) and § 63.1063(d)(1)]

(3) Any of the following conditions constitutes a failure in the integrity of the internal floating roof system. [40 C.F.R. § 63.1063(d)]

(i) Stored liquid on the floating roof.

(ii) Holes or tears in the primary or secondary seal (if one is present).

(iii) Floating roof deck, deck fittings, or rim seals that are not functioning as designed.

(iv) Failure to comply with the operational requirements of 40 C.F.R. § 63.1063(b).

(v) Gaps of more than 0.32 centimeters (1/8 inch) between any deck fitting gasket, seal, or wiper (required by 40 C.F.R. § 63.1063(a)) and any surface that it is intended to seal.

b. No later than May 8, 2027, CITGO shall conduct LEL monitoring according to the provisions of 40 C.F.R. § 63.425(j) as described below. [40 C.F.R. § 63.11092(f)(1)(ii)]

(1) CITGO shall conduct LEL monitoring at least once every 12 months. If the measurement cannot be performed due to wind speeds exceeding those specified in § 63.425(j)(3)(iii), the measurement must be performed within 30 days of the previous attempt. [40 C.F.R. § 63.425(j)(1)]

(2) CITGO shall check the calibration of the LEL meter per manufacturer specifications immediately before and after the measurements as specified in §§ 63.425(j)(2)(i) and (ii). If tubing will be used for the measurements, the

tubing must be attached during calibration so that the calibration gas travels through the entire measurement system. Any tubing used must be non-crimping and made of Teflon or other inert material. [40 C.F.R. §§ 63.425(j) and (j)(2)]

(3) CITGO shall conduct LEL measurements as specified below.

- (i) Measurements of the vapors within the IFR storage vessel shall be collected no more than 3 feet above the IFR.
- (ii) Measurements shall be taken for a minimum of 20 minutes, logging the measurements at least once every 15 seconds, or until one 5-minute average as determined according to § 63.425(j)(5)(ii) exceeds 25% of the LEL without the use of purge gas.
- (iii) Measurements shall be taken when the wind speed at the top of the tank is 5 mph or less to the extent practicable, but in no case shall measurements be taken when the sustained wind speed is greater than the annual average wind speed at the site or 15 mph, whichever is less.
- (iv) Measurements should be conducted when the IFR is floating with limited product movement (limited filling or emptying of the tank).
[40 C.F.R. § 63.425(j)(3)]

(4) CITGO shall use the methods in 40 C.F.R. §§ 425(j) to determine the actual vapor concentration within the storage vessel and calculate the 5-minute rolling average to demonstrate compliance with the emission limit in Subpart BBBBBB, Table 1, Row 2(c).

(5) A deviation of the LEL is considered an inspection failure under 40 C.F.R. § 113b(a)(2) and must be remedied as such (as described previously). Any repairs must be confirmed effective through re-monitoring of the LEL and meeting the level in Subpart BBBBBB, Table 1, Row 2(c) within the timeframe specified in 40 C.F.R. § 113b(a)(2), as described previously. [40 C.F.R. § 11092(f)(1)(ii)]

7. Equipment Leak Inspections

Note: *Equipment in gasoline service* is defined in Section I(D) of this license.

CITGO shall implement a leak detection and repair program for all equipment in gasoline service according to the requirements of paragraphs (a) or (b) below, as applicable. [40 C.F.R. § 63.11089(a)]

- a. CITGO shall comply with the following until it has begun complying with the requirements of paragraph (b) below. The requirements of this paragraph (a) do not apply when demonstrating compliance with paragraph (b). [40 C.F.R. §§ 63.11089(b) and (c)]

- (1) CITGO shall perform a monthly leak inspection of all equipment in gasoline service. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 C.F.R. § 63.11089(b)]
- (2) A logbook shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the logbook shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 C.F.R. § 63.11089(b)(1)]
- (3) Each detection of a liquid or vapor leak shall be recorded in the logbook. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than five calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. CITGO shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 C.F.R. §§ 63.11089(b)(2) and (3)]

b. No later than May 8, 2027, CITGO shall comply with the requirements of 40 C.F.R. § 60.502a(j) except as provided in 40 C.F.R. §§ 63.11089(c)(1) through (4) as described below. [40 C.F.R. § 63.11089(c)]

For this section, “equipment in gasoline service” also includes all equipment in the vapor collection system, the vapor processing system, and each loading rack and loading arm handling gasoline.

CITGO does not have any “sampling connection systems” as that term is defined in 40 C.F.R. § 60.481a because the facility does not have any process units that produce any of the chemicals listed in § 60.489a.

- (1) CITGO shall conduct leak detection monitoring of all pumps, valves, and connectors in gasoline service using either of the methods specified below:
 - (i) Use optical gas imaging (OGI) to annually monitor all pumps, valves, and connectors in gasoline service as specified in 40 C.F.R. § 60.503a(e)(2) or
 - (ii) Use 40 C.F.R. Part 60, Appendix A, Method 21 as specified in 40 C.F.R. §§ 60.503a(e)(1) and 60.502(j)(1)(ii)(A) through (C) except that monitoring shall be conducted annually instead of quarterly.
[40 C.F.R. § 60.502a(j)(1)]
- (2) During normal duties, CITGO shall record leaks identified by audio, visual, or olfactory methods. [40 C.F.R. § 60.502a(j)(2)]

(3) CITGO shall conduct instrument monitoring pursuant to paragraph (1) above each pressure relief device annually and within five calendar days after each pressure release. [40 C.F.R. § 60.502a(j)(4)(i)]

(4) For open-ended valves or lines, CITGO shall comply with the following. [40 C.F.R. § 60.502a(j)(6)]

- (i) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except for:
 1. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset; or
 2. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system.[40 C.F.R. §§ 60.482-6a(a), (d), and (e)]
- (ii) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 C.F.R. § 60.482-6a(b)]
- (iii) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (i) above. [40 C.F.R. § 60.482-6a(c)]

(5) A leak is detected if any of the following occurs:

- Emissions are observed when using OGI;
- An instrument reading of 10,000 ppm or greater when using Method 21; or
- Evidence of a potential leak is found at any time by audio, visual, olfactory, or any other detection method for any equipment in gasoline service.

When a leak is detected from any equipment in gasoline service, CITGO shall comply with the following requirements: [40 C.F.R. § 60.502a(7)]

- (i) CITGO shall attach a weatherproof and readily visible identification, marked with the equipment identification number, to the leaking equipment. The identification on equipment may be removed after it has been repaired.
- (ii) An initial attempt at repair shall be made as soon as practicable, but no later than five calendar days after the leak is detected. An initial attempt at repair

is not required if the leak is detected using OGI and the equipment identified as leaking would require elevating the repair personnel more than two meters above a support surface.

(iii) Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak, except as described below. For leaks identified using either OGI or Method 21, the leak is considered repaired when instrument re-monitoring of the equipment does not detect a leak. For leaks identified using audio, visual, or olfactory methods, the leak is considered repaired when the leak can no longer be identified using audio, visual, or olfactory methods. [40 C.F.R. §§ 60.502a(j)(7) and (8)]

1. Delay of repair of equipment will be allowed for equipment that is isolated from the affected facility and that does not remain in gasoline service.
2. Delay of repair for valves and connectors will be allowed if:
 - A. CITGO demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay or repair; and
 - B. When repair procedures are affected, the purged material is collected and destroyed or recovered in a control device as specified in 40 C.F.R. § 60.502a(j)(8)(ii)(B).
3. Delay of repair will be allowed for a valve, but not later than three months after the leak was detected, if valve assembly replacement is necessary, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted.
4. Delay of repair for pumps will be allowed if:
 - A. Repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and
 - B. Repair is completed as soon as practicable, but not later than six months after the leak was detected.

(iv) If a leak cannot be repaired within 15 days, CITGO shall notify the Department of the leak, the reason for the delay, and the expected date of the repair. CITGO shall promptly notify the Department of the date that the leak is successfully repaired. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

8. General Recordkeeping Requirements

Any records required to be maintained by 40 C.F.R. Part 63, Subpart BBBB that are submitted electronically via the EPA's Compliance Emissions Reporting Interface (CEDRI) may be maintained in electronic format. This ability to maintain electronic

copies does not affect the requirement for facilities to make records, data, and reports available upon request to the Department or EPA as part of an on-site compliance evaluation. [40 C.F.R. § 63.11094(o)]

9. Recordkeeping for Storage Tanks

Note: Regardless of the requirements of Subpart BBBBBB, Standard Condition (6) requires records to be maintained for a minimum of six years.

No later than May 8, 2027, CITGO shall keep the following records of each LEL monitoring event:

- a. Date and time of the LEL monitoring and the storage vessel being monitored;
- b. A description of the monitoring event (e.g., monitoring conducted concurrent with visual inspection required under § 63.1063(d)(2) or re-monitoring after repair attempt);
- c. Wind speed at the top of the storage vessel on the date of LEL monitoring;
- d. The LEL meter manufacturer and model number used, as well as an indication of whether tubing was used during the LEL monitoring, and if so, the type and length of tubing used;
- e. Calibration checks conducted before and after making the measurements, including both the span and check and instrumental offset. This includes the hydrocarbon used as the calibration gas, the Certificate of Analysis for the calibration gas(es), the results of the calibration check, and any corrective action for calibration checks that do not meet the required response;
- f. Location of the measurements and location of the floating roof;
- g. Each measurement (taken at least once every 15 seconds); The records should indicate whether the recorded values were automatically corrected using the meter's programming. If the values were not automatically corrected, record both the raw (as the calibration gas) and corrected measurements, as well as the correction factor used.
- h. Each 5-minute rolling average reading; and
- i. If the vapor concentration of the storage vessel was above 25 percent of the LEL on a 5-minute rolling average basis, a description of whether the floating roof was repaired, replaced, or taken out of gasoline service.

[40 C.F.R. §63.11094(a)(2)]

10. Recordkeeping for the Loading Rack

Note: Regardless of the requirements of Subpart BBBB, Standard Condition (6) requires records to be maintained for a minimum of six years.

CITGO shall record and maintain the following records for the Loading Rack in either hardcopy or electronic format:

- a. The test results for each gasoline cargo tank loading at the facility as specified in 40 C.F.R. §§ 63.11094(b).
- b. Description of the types, identification numbers, and locations of all equipment in gasoline service. [40 C.F.R. § 63.11094(c)]
- c. For equipment leak inspections conducted pursuant to § 63.11089(b) (i.e., inspections conducted using sight, sound, and smell), CITGO shall record in the logbook the following information for each leak that is detected:
 - (1) The equipment type and identification number.
 - (2) The nature of the leak (i.e., vapor or liquid) and the method of detection (i.e., sight, sound, or smell).
 - (3) The date the leak was detected and the date of each attempt to repair the leak.
 - (4) Repair methods applied in each attempt to repair the leak.
 - (5) “Repair delayed” and the reason for the delay if the leak is not repaired within fifteen (15) calendar days after discovery of the leak.
 - (6) The expected date of successful repair of the leak if the leak is not repaired within fifteen (15) days.
 - (7) The date of successful repair of the leak.[40 C.F.R. § 63.11094(d)]
- d. No later than May 8, 2027, CITGO shall maintain records of each leak inspection and leak identified under 40 C.F.R. § 63.11089(c) (i.e., OGI or Method 21 inspections) as specified in 40 C.F.R. §§ 63.11094(e)(1) through (5). [40 C.F.R. § 63.11094(e)]
- e. Up-to-date, readily accessible records of the CMS data. The records shall indicate the time intervals during which loadings of gasoline cargo tanks have occurred or, alternatively, shall record the operating parameter data only during such loadings. The date and time of day shall also be indicated at reasonable intervals on this record. [40 C.F.R. § 63.11094(f)(1)]
- f. Up-to-date, readily accessible copy of the monitoring and inspection plan required under 40 C.F.R. § 63.11092(b)(1)(iii)(B)(2). [40 C.F.R. § 63.11094(f)(3)]
- g. Up-to-date, readily accessible records of all system malfunctions, as specified in 40 C.F.R. § 63.11092(b)(1)(iii)(B)(2)(v). [40 C.F.R. § 63.11094(f)(4)]
- h. Records of the thermal oxidation system (VCU) as specified in 40 C.F.R. § 63.11094(g)(2).
- i. Each instance in which liquid product was loaded into a gasoline cargo tank for which vapor tightness documentation required under 40 C.F.R. § 502(e)(1) was not

provided or available in the terminal's records. These records shall include, at a minimum:

- (1) Cargo tank owner and address;
- (2) Cargo tank identification number;
- (3) Date and time liquid product was loaded into a gasoline cargo tank without proper documentation; and
- (4) Date proper documentation was received or statement that proper documentation was never received.

[40 C.F.R. § 63.11094(h)]

j. Each instance when liquid product was loaded into gasoline cargo tanks not using submerged filling, or, if applicable, not equipped with vapor collection or balancing equipment that is compatible with the terminal's vapor collection system. These records shall include at a minimum:

- (1) Date and time of liquid product loading into gasoline cargo tank not using submerged filling, improperly equipped, or improperly connected;
- (2) Type of deviation (e.g., not submerged filling, incompatible equipment, not properly connected); and
- (3) Cargo tank identification number.

[40 C.F.R. § 63.11094(i)]

k. The following records for each deviation of an emissions limitation (including operating limit), work practice standard, or operation and maintenance requirement:

- (1) Date, start time, and duration of each deviation;
- (2) List of the affected sources or equipment for each deviation, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate emissions; and
- (3) Actions taken to minimize emissions in accordance with § 63.11085(a) (i.e., general duty to minimize emissions).

[40 C.F.R. § 63.11094(k)]

l. The average gasoline throughput (in gallons per day). [40 C.F.R. § 63.11094(l)]

11. Notifications and Reports

- a. CITGO has previously submitted an Initial Notification and a Notification of Compliance Status pursuant to 40 C.F.R. § 63.11093.
- b. Prior to May 8, 2027, CITGO shall submit to the Department and EPA semiannual compliance reports with the following information, as applicable. [40 C.F.R. § 63.11095(c)]
 - (1) The information specified in 40 C.F.R. § 63.1066;
 - (2) For loading racks, each loading of gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility; and

(3) For equipment leak inspections, the number of equipment leaks not repaired within 15 days after detection.

- c. Prior to May 8, 2027, CITGO shall submit to the Department and EPA excess emissions reports at the time the semiannual compliance report is submitted. The sections 40 C.F.R. §§ 63.11095(c)(2)(i) through (v) identify what constitutes an excess emissions event and the information to be included in the excess emissions report. [40 C.F.R. § 63.11095(c)(2)]
- d. On and after May 8, 2027, CITGO shall submit to the Department and EPA semiannual compliance reports that contain the information in 40 C.F.R. §§ 63.11095(d)(1) and (4) through (9), as applicable. [40 C.F.R. § 11095(d)]
- e. CITGO shall submit semiannual compliance reports to the Department and EPA with the information outlined in paragraphs (b) through (d) above according to the requirements of 40 C.F.R. § 63.13. Beginning May 8, 2027, or once the report template for Subpart BBBB has been available on the CEDRI website for one year, whichever date is later, CITGO shall submit all subsequent semiannual compliance reports using the appropriate electronic report template on the CEDRI website and following the procedure specified in 40 C.F.R. § 63.9(k), except any medium submitted through mail to EPA must be sent to the attention of the Gasoline Distribution Sector Lead. The date report templates become available will be listed on the CEDRI website. [40 C.F.R. § 11095(e)]

G. *Control of Petroleum Storage Facilities, 06-096 C.M.R. ch. 171*

CITGO is a petroleum storage facility as that term is defined in 06-096 C.M.R. ch. 171. Following are applicable requirements of 06-096 C.M.R. ch. 171 not addressed elsewhere.

Enforceable by State-only

1. Inspections Using Optical Gas Imaging

CITGO shall perform inspections in accordance with the following:

- a. At least once per calendar quarter CITGO shall conduct an inspection survey of each internal floating roof tank, each fixed roof tank, and facility fugitive emissions component using optical gas imaging equipment.
[06-096 C.M.R. ch. 171, § 5(A)(1)]
- b. The optical gas imaging equipment used must meet the following specifications as verified by the manufacturer:
 - (1) Capable of imaging gases in the spectral range for benzene; and

(2) Capable of imaging a gas that is half methane and half propane at a concentration of 10,000 ppm at a flow rate of \leq 60 grams per hour from a quarter inch diameter orifice.

[06-096 C.M.R. ch. 171, § 5(A)(2)]

- c. CITGO was required to submit an optical gas imaging leak detection and repair plan by October 3, 2023. [06-096 C.M.R. ch. 171, § 5(A)(3)] This plan was submitted on October 2, 2023.
- d. If visible emissions are observed in a fugitive emissions component using optical gas imaging equipment, within two calendar days CITGO shall determine whether a leak, as defined by 06-096 C.M.R. ch. 171, is present by using photo ionization detection (PID) technology or flame ionization detection (FID) technology. Alternatively, CITGO may elect to presume that a leak is present without further confirmation. If a leak is determined or presumed to be present, CITGO shall initiate corrective action and repair the leak within 15 calendar days.
 - (1) If the presence of a leak cannot be confirmed due to safety concerns or physical constraints, CITGO shall presume the leak to be confirmed and initiate corrective action and repair the leak within 15 calendar days.
 - (2) If a leak cannot be repaired within 15 days, CITGO shall notify the Department of the leak, the reason for the delay, and the expected date of the repair. CITGO shall promptly notify the Department of the date that the leak is successfully repaired. A fugitive emissions component is considered repaired when the optical gas imaging equipment shows no indication of visible emissions or there is no longer indication of a leak as that term is defined in this regulation under normal use conditions.

[06-096 C.M.R. ch. 171, § 5(A)(5)]

- e. For all quarterly inspections conducted using optical gas imaging equipment CITGO shall keep the following records:
 - (1) The date of the inspection;
 - (2) Identification and description of the equipment and areas inspected;
 - (3) A description of any leaks detected;
 - (4) An electronic recording of the optical gas imaging equipment images; and
 - (5) A description of any resulting corrective actions or repairs and the dates they were made.

[06-096 C.M.R. ch. 171, § 7(B)]

2. Fenceline Monitoring

CITGO is subject to the fenceline monitoring requirements in 06-096 C.M.R. ch. 171, § 6(B) because it is a petroleum storage facility that operates internal floating roof tanks. Therefore, CITGO shall conduct sampling along the facility property boundary and analyze the samples in accordance with 40 C.F.R. Part 63, Appendix A, Methods 325A and 325B as specified below.

- a. The monitoring program shall be designed and operated by a qualified, independent, third-party entity. [06-096 C.M.R. ch. 171, § 6(B)(1)]
- b. The target analytes shall be benzene, ethylbenzene, toluene, and xylenes. [06-096 C.M.R. ch. 171, § 6(B)(2)]
- c. A maximum 14-day sampling period shall be used except under extenuating circumstances as described below. Upon approval by the Department, CITGO may use a shorter sampling period.

When extenuating circumstances do not permit safe deployment or retrieval of passive samplers (e.g., extreme weather, power failure), sampler placement or retrieval earlier or later than the prescribed schedule is allowed but must occur as soon as safe access to sampling sites is possible.

[06-096 C.M.R. ch. 171, § 6(B)(3)]

- d. CITGO was required to submit a site-specific fenceline monitoring plan prepared by a qualified, independent, third-party entity by November 3, 2023. [06-096 C.M.R. ch. 171, § 6(B)(4)] This plan was submitted on October 31, 2023.
- e. CITGO shall conduct fenceline monitoring through use of a qualified, independent, third-party entity. Monitoring must be conducted in accordance with the site-specific fenceline monitoring plan as approved by the Department. [06-096 C.M.R. ch. 171, § 6(B)(5)]
- f. CITGO shall keep the following records:
 - (1) Coordinates of all passive monitors and the meteorological station used. Coordinates shall be determined using a method with an accuracy of three meters or less.
 - (2) Average ambient temperature and barometric pressure measurements for the sampling period.
 - (3) Individual sample results.
 - (4) Method detection limit for each sample.

[06-096 C.M.R. ch. 171, § 7(C)]

g. CITGO shall submit a report to the Department for each calendar quarter with the following information. Each quarterly report must be electronically submitted no later than 45 days after the end of the reporting period.

- (1) Facility name and address.
- (2) Year and reporting quarter (i.e., Quarter 1, Quarter 2, Quarter 3, or Quarter 4).
- (3) For each passive monitor:
 - (i) The latitude and longitude location coordinates;
 - (ii) The sampler name; and
 - (iii) Identification of the type of sampler (e.g., regular monitor, duplicate, field blank, etc.)
- (4) The beginning and ending dates for each sampling period.
- (5) Individual sample results in units of micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) for each monitor for each sampling period that ends during the reporting period. Results below the method detection limit shall be flagged as such and reported at the method detection limit.
- (6) Meteorological data collected during each sampling period, including wind speed and direction.

[06-096 C.M.R. ch. 171, § 8]

H. Loading Rack

The Loading Rack dispenses petroleum products into tank trucks. A Vapor Combustion Unit (VCU) is used to control emissions whenever gasoline is loaded or whenever a truck is loaded that carried gasoline as its most recent previous load.

The VCU is a John Zink thermal oxidizer with a process rate of 13,440 gallons (of product loaded) per minute. This unit was installed in 1995. The unit consists of 6 burners: two burners in stage 1 and four burners in stage 2. It has a total maximum heat input of 114 MMBtu/hr. The VCU may use propane as a pilot and/or assist fuel.

1. Visible Emissions Regulation, 06-096 C.M.R. ch. 101

The VCU is subject to the following visible emission standard pursuant to *Visible Emissions Regulation, 06-096 C.M.R. ch. 101:*

Visible emissions from the VCU shall not exceed 30% opacity on a six-minute block average basis, except that for periods of startup, shutdown, and malfunction CITGO may elect to comply with the work practice standards listed in 06-096 C.M.R. ch. 101, § 4(A). [06-096 C.M.R. ch. 101, § 3(A)(6)]

The VCU is also subject to the following visible emission standard established under BPT:

Visible emissions from the VCU shall not exceed 5% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 140, BPT (A-460-70-A-I, 4/9/2002)]
Enforceable by State-only

2. *Bulk Terminal Petroleum Liquid Transfer Requirements*, 06-096 C.M.R. ch. 112

CITGO shall comply with all requirements of 06-096 C.M.R. ch. 112 applicable to the Loading Rack including, but not limited to, the following:

- a. Loading of liquid product into gasoline tank trucks shall be limited to those which have been certified within the last 12 months as vapor-tight pursuant to *Gasoline Tank Truck Tightness Self-Certification*, 06-096 C.M.R. ch. 120. [06-096 C.M.R. ch. 112, § 3(A)]
- b. CITGO shall vent all displaced vapors and gases to the VCU which shall be maintained in good working order and operated at all times gasoline is being transferred to tank trucks. [06-096 C.M.R. ch. 112, § 3(B)]
- c. CITGO shall prevent liquid drainage from the loading device when it is not in use. [06-096 C.M.R. ch. 112, § 3(C)]
- d. All loading and vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected. [06-096 C.M.R. ch. 112, § 3(D)]
- e. The pressure in the vapor collection system shall not exceed the tank truck pressure relief settings. [06-096 C.M.R. ch. 112, § 3(E)]
- f. CITGO shall not allow gasoline to be discarded in sewers, stored in open containers, or otherwise handled in any manner that would result in evaporation. [06-096 C.M.R. ch. 112, § 3(E)]
- g. Emissions of VOC from the VCU shall not exceed 35 milligrams per liter of gasoline transferred. [06-096 C.M.R. ch. 112, § 4(A)]

3. Gasoline Tank Truck Tightness Self-Certification, 06-096 C.M.R. ch. 120

CITGO shall comply with all requirements of 06-096 C.M.R. ch. 120 applicable to the Loading Rack including, but not limited to, the following:

- a. CITGO shall not allow loading of gasoline into tank trucks and trailers unless they have been certified pursuant to 40 C.F.R. Part 60, Appendix A, Method 27 and labeled as specified in 06-096 C.M.R. ch. 120, § 3(A)(2).
[06-096 C.M.R. ch. 120, § 3(A)]
- b. The vapor control system at the Loading Rack shall be designed and operated such that during loading operations:
 - (1) The tank compartments of the tank truck shall not be subjected to a gauge pressure exceeding 18 inches of water or a vacuum exceeding 6 inches of water;
 - (2) Readings equal to or greater than 100% of the lower explosive limit (LEL) shall not be obtained within 1 inch around any potential leak source of the tank truck including all loading couplings and vapor lines and fittings employed in transferring gasoline to the tank truck; and
 - (3) There shall be no visible or audible liquid or vapor leaks in the vicinity of the Loading Rack.
[06-096 C.M.R. ch. 120, § 3(C)]
- c. If the vapor control system exceeds any of the limits listed in (b), CITGO shall repair and retest the system within fifteen (15) days. Records of all repairs and retests shall be maintained and available for inspection by the Department during normal business hours and copies shall be provided to the Department upon request.
[06-096 C.M.R. ch. 120, § 3(D)]

4. Control of Petroleum Storage Facilities, 06-096 C.M.R. ch. 171

Control of Petroleum Storage Facilities, 06-096 C.M.R. ch. 171, contains the following applicable requirements specific to CITGO's Loading Rack.

Enforceable by State-only

- a. Liquid petroleum product shall not be loaded into any tank truck or trailer whose most recent previous load was gasoline unless vapors displaced from the tank truck or trailer are captured and routed to the VCU. The vapor collection and VOC control systems shall be maintained in good working order and must be operated at all times product is being transferred to such tank trucks or trailers. [06-096 C.M.R. ch. 171, § 4(C)(1)]

- b. All loading and vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected. [06-096 C.M.R. ch. 171, § 4(C)(2)]
- c. The pressure in the vapor collection system shall not exceed the tank truck or trailer pressure relief settings. [06-096 C.M.R. ch. 171, § 4(C)(3)]

5. New Source Performance Standards (NSPS)

The Loading Rack is subject to the New Source Performance Standard (NSPS) titled *Standards of Performance for Bulk Gasoline Terminals*, 40 C.F.R. Part 60, Subpart XX. These standards apply to loading racks at bulk gasoline terminals which deliver liquid product into gasoline tank trucks and were constructed after December 17, 1980.

CITGO shall comply with all applicable requirements of the most current version of 40 C.F.R. Part 60, Subpart XX. Below is an analysis of the applicable requirements of this regulation as of the date of this air emission license. Should EPA adopt changes to this regulation, CITGO shall apply to amend this air emission license to address any new or changed applicable requirements within 60 days of publication of the final rule in the Federal Register.

a. Standards

1. The Loading Rack shall be equipped with a vapor collection system designed to collect the total organic compound vapors displaced from the tank trucks during product loading. [40 C.F.R. § 60.502(a)]
2. Emissions to the atmosphere from the VCU are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded. [40 C.F.R. § 60.502(b)]
3. The VCU shall be designed to prevent any TOC vapors collected at one loading rack from passing to another loading rack. [40 C.F.R. § 60.502(d)]
4. Loading of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline trucks using the procedures outlined in 40 C.F.R. § 60.502(e).
5. CITGO shall act to assure that loading of gasoline tank trucks at the facility are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system. [40 C.F.R. § 60.502(f)]
6. CITGO shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck at the affected facility. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the affected loading racks. [40 C.F.R. § 60.502(g)]

7. The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 pascals (450 mm of water) during product loading.
[40 C.F.R. § 60.502(h)]
8. No pressure-vacuum vent in the vapor collection system shall begin to open at a system pressure less than 4,500 pascals (450 mm of water).
[40 C.F.R. § 60.502(i)]
9. Each calendar month, the vapor collection system, the VCU, and the Loading Rack shall be inspected during the loading of gasoline tank trucks for liquid or vapor leaks. Detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within fifteen (15) calendar days after it is detected.
[40 C.F.R. § 60.502(j)]

b. Recordkeeping

CITGO shall keep the following records pursuant to 40 C.F.R. § 60.505:

1. Records of tank truck vapor tightness documentation required by 40 C.F.R. § 60.502(e)(1) pursuant to 40 C.F.R. §§ 60.505(a), (b), (d), and (e). The records required by 40 C.F.R. Part 63, Subpart BBBB are determined to be at least as stringent as these NSPS requirements. Therefore, these Subpart XX requirements are streamlined to the Subpart BBBB requirements, and only the Subpart BBBB requirements shall be included in the Order section of this air emission license.
2. Records of monthly leak inspections required under 40 C.F.R. § 60.502(j) pursuant to 40 C.F.R. §§ 60.505(c) and (e).

6. Best Practical Treatment (BPT) and New Source Review (NSR) Requirements

Air Emission License A-460-77-1-M (6/9/2008) addressed the addition of ethanol as a product to be stored in CITGO's IFR tanks and added several new requirements through best available control technology (BACT).

Additionally, an updated BPT analysis for the Loading Rack was performed as part of this renewal application. The Department determined that the standards and requirements of applicable State and Federal regulations as well as the following additional requirements represent BPT for the Loading Rack:

- a. Any tank truck which has carried gasoline as the most recent previous load shall utilize the vapor collection system and VCU during the entire loading process. This requirement is streamlined to the similar requirement in 06-096 C.M.R. ch. 171.

b. Emissions from the VCU shall not exceed the following:

Pollutant	Emission Limit
PM	0.2 lb/1,000 gal product in process gases controlled ^a
NO _x	0.0334 lb/1,000 gal of product loaded ^b
CO	0.0835 lb/1,000 gal of product loaded ^b
VOC	10 mg/liter of product loaded

^aBased on AP-42 Table 1.5-1.

^bBased on manufacturer data

c. BPT for visible emissions from the VCU was discussed earlier in this license.

d. CITGO shall not exceed a petroleum product throughput at the loading rack as follows (based on a 12-month rolling total):

Product	Throughput Limit
gasoline/ethanol	635,000,000 gallons
distillate oil, jet fuel, kerosene	350,000,000 gallons
additives	590,000 gallons

[06-096 C.M.R. ch. 115, BACT (A-460-77-1-M, 6/9/2008)]

e. The Loading Rack shall not exceed a product loading rate of 13,440 gallons per minute.

f. CITGO shall not exceed an annual propane use of 400,000 gallons per 12-month period as auxiliary fuel to the VCU.

7. Emission Limits and Streamlining

For the Loading Rack and VCU, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested (* denotes a request for streamlining), and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.08 lb/MMBtu	06-096 C.M.R. ch. 103, § 2(B)(1)(b)	0.2 lb/1,000 gal of product in process gases burned *
	0.2 lb/1,000 gal of product in process gases burned	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
NO _x	0.0334 lb/1,000 gal of product loaded	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	0.0334 lb/1,000 gal of product loaded
CO	0.0835 lb/1,000 gal of product loaded	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	0.0835 lb/1,000 gal of product loaded
VOC	35 mg/liter of product loaded	06-096 C.M.R. ch. 112, § 4(a)	35 mg/liter of product loaded *
	80 mg/liter of product loaded	40 C.F.R. Part 63, Subpart BBBBBB, Table 2	
	35 mg/liter of product loaded	40 C.F.R. Part 60, Subpart XX, § 60.502(b)	
	10 mg/liter of product loaded	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	10 mg/liter of product loaded Enforceable by State-only
Visible Emissions	As described earlier in this license		

8. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Loading Rack and VCU shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu	40 C.F.R. Part 60, Appendix A, Method 5	As requested
NO _x	lb/1,000 gal of product loaded	40 C.F.R. Part 60, Appendix A, Method 7E	As requested
CO	lb/1,000 gal of product loaded	40 C.F.R. Part 60, Appendix A, Method 10	As requested
VOC	mg/liter of product loaded	40 C.F.R. Part 60, Subpart XX, § 60.503	Annually, prior to May 15 th of each year
Visible Emissions	% opacity on a 6-minute block average basis	40 C.F.R. Part 60, Appendix A, Method 9	As requested

9. Compliance Assurance Monitoring

CAM is not applicable to the Loading Rack or VCU.

10. Periodic Monitoring

CITGO shall record data and maintain records for the following periodic monitoring values for the Loading Rack and VCU whenever the equipment is operating. Additional recordkeeping requirements are included with the requirements for 40 C.F.R. Part 63, Subpart BBBB.

- a. Hours of operation on a monthly and calendar year basis; [06-096 C.M.R ch. 137]
- b. Gallons of propane used in the VCU on a monthly and 12-month rolling total basis; [06-096 C.M.R. ch. 137]
- c. Gallons of throughput at the loading rack for each product stored on a monthly and 12-month rolling total basis; [06-096 C.M.R. ch. 137]
- d. Records of monthly leak inspections required under 40 C.F.R. § 60.502(j) pursuant to 40 C.F.R. §§ 60.505(c) and (e);
- e. For each exceedance of the operational limits in 06-096 C.M.R. ch. 120, records of all repairs and retests of the vapor control system; and [06-096 C.M.R. ch. 120, § 3(D)]
- f. Records of any maintenance activities performed (planned or unplanned) on the VCU. [40 C.F.R. § 70.6(c)(1)]

11. Parameter Monitors

CITGO shall install, calibrate, certify, operate, and maintain a CMS for the VCU pursuant to 40 C.F.R. § 63.11092(b)(1)(iii)(B) which measures the presence of pilot flame. The VCU CMS is considered a parameter monitor.

12. CEMS and COMS

There are no continuous emission monitoring systems (CEMS) or continuous opacity monitoring systems (COMS) required for the Loading Rack or VCU.

I. Internal Floating Roof Tanks

The following internal floating roof (IFR) tanks are used to store gasoline, ethanol, or gasoline/ethanol blend. Annual throughput for each tank varies depending on the product stored, size, and demand.

Storage Tank	Date of Installation	Capacity (gallons)	Control Equipment
Tank #1*	1947	2,800,000	Cone internal floating roof
Tank #3	1974	3,800,000	Cone internal floating roof
Tank #4	1974	3,800,000	Cone internal floating roof
Tank #6*	1974	1,400,000	Cone internal floating roof
Tank #7*	1965	4,200,000	Cone internal floating roof
Tank #9	1966	2,500,000	Cone internal floating roof
Tank #10	1962	2,700,000	Cone internal floating roof

*Tanks #1, #6, and #7 are also licensed to store distillate oil, jet fuel, and kerosene.

CITGO shall meet the following requirements for Tanks #1, 3, 4, 6, 7, 9, and 10 regardless of what product is being stored. When a product other than gasoline, ethanol, or gasoline/ethanol blend is being stored, the following requirements are incorporated through 06-096 C.M.R. ch. 140, BPT.

1. Petroleum Liquid Storage Control, 06-096 C.M.R. ch. 111

CITGO shall comply with all requirements of 06-096 C.M.R. ch. 111 applicable to the IFR tanks including, but not limited to, the following:

- a. All IFR tanks shall be equipped, maintained, and operated such that:
 - (1) There is an IFR with closure seal(s) between the roof edge and the tank wall; [06-096 C.M.R. ch. 111, § 3(A)(1)]
 - (2) The IFR and closure seal(s) are maintained such that there are no holes, tears, or other openings in the seal or between the seal and the floating roof; [06-096 C.M.R. ch. 111, § 3(A)(2)]
 - (3) All storage tank openings, except stub drains, are equipped with covers, lids, or seals. Each cover over an opening in an IFR, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall be closed at all times, except when the cover must be open for access. [06-096 C.M.R. ch. 111, § 3(A)(3) and 40 C.F.R. § 63.1063(b)(3)] and
 - (4) Each automatic bleeder vent (vacuum breaker vent) and rim space vent is closed at all times, except when required to be open to relieve excess pressure or vacuum, in accordance with the manufacturer's design. [06-096 C.M.R. ch. 111, § 3(A)(3) and 40 C.F.R. § 63.1063(b)(4)]

b. CITGO shall comply with the following source inspection requirements for the IFR tanks:

- (1) Routine inspections of floating roofs shall be conducted through roof hatches once every month. [06-096 C.M.R. ch. 111, § 3(A)(4)]
- (2) Each IFR tank shall be completely emptied and degassed every 10 years. At such time, CITGO shall perform an inspection by visually inspecting the floating roof deck, deck fittings, and rim seals from within the storage vessel. The inspection may be performed entirely from the top side of the floating roof, as long as there is visual access to all deck components.
[06-096 C.M.R. ch. 111, § 3(A)(5)]

2. *Degassing of Petroleum Storage Tanks, Marine Vessels, and Transport Vessels*, 06-096 C.M.R. ch. 170

CITGO shall comply with all requirements of 06-096 C.M.R. ch. 170 applicable to the IFR tanks including, but not limited to, the following:

Enforceable by State-only

- a. Control Requirements [06-096 C.M.R. ch. 170, § 4]
 - (1) When emptying and degassing a storage tank whose most recently stored product was gasoline, ethanol, or a gasoline/ethanol blend, CITGO shall:
 - (i) To the extent practicable, empty the storage tank of product; and
 - (ii) Exhaust the vapor space of the storage tank to a vapor control system designed to achieve a VOC control efficiency of at least 95% until the VOC concentration is less than 5,000 ppmv, measured as methane, or is 10% or less of the lower explosive limit (LEL), as methane, for at least one hour.Compliance shall be demonstrated through continuous monitoring of the VOC concentration in the line between the storage tank being degassed and the vapor control device. [06-096 C.M.R. ch. 170, § 7(B)]
The probe inlet of the monitoring instrument shall be located in the line between the tank or vessel being degassed and the control device or other location as approved by the Department. [06-096 C.M.R. ch. 170, § 6]
The monitoring device shall be calibrated, maintained, and operated according to the manufacturer's instructions.
[06-096 C.M.R. ch. 170, § 7(A)]

- (2) The vapor control system used in the degassing process shall be free of liquid and vapor leaks. This includes, but is not limited to, the degassing equipment, vacuum truck, pumps, hoses, and connections.
- (3) Any visible or audible liquid or vapor leak originating from the vapor control device or other associated product recovery device shall be repaired as soon as possible.
- (4) CITGO shall comply with the following to control emissions from any sludge removed from a storage tank containing, or which most recently contained, gasoline, ethanol, or gasoline/ethanol blend. These requirements do not apply when sludge is immediately transferred (e.g., pumped) to a floating roof tank whose roof is not resting on its legs.
 - (i) During sludge removal, CITGO shall vent emissions from the vessel receiving the sludge to a vapor control system designed to achieve a VOC control efficiency of at least 95%;
 - (ii) The removed sludge must be transported in containers that are vapor-tight and free of liquid leaks; and
 - (iii) Until final disposal, removed sludge must be stored in containers that are vapor-tight and free of liquid leaks or in tanks that are vented to a vapor control system designed to achieve a VOC control efficiency of at least 95%.

b. Inspection Requirements [06-096 C.M.R. ch. 170, §§ 5 and 6]

During a degassing event of a storage tank whose most recently stored product was gasoline, ethanol, or gasoline/ethanol blend, CITGO shall:

- (1) At least once per calendar day, inspect the vapor control system for liquid and vapor leaks. To check for vapor leaks, the owner or operator shall use photo ionization detection (PID) technology or flame ionization detection (FID) technology.

Measurement of VOC concentrations shall be conducted in accordance with 40 C.F.R. Part 60, Appendix A, Method 21, using an appropriate analyzer calibrated with methane at a frequency and method as recommended by the manufacturer, at a distance of one inch (2.54 cm) or less from the source. Alternate test methods may be allowed upon written approval by the Department.

(2) If a liquid or vapor leak is observed, degassing must be discontinued within two hours of leak observance unless the leak is repaired or discontinuing degassing would present an imminent safety hazard.

c. During times the vapor control system is in use, CITGO shall monitor and record the operational parameters necessary to demonstrate the proper functioning of the vapor control system in accordance with the requirements of 06-096 C.M.R. ch. 170, § 7(C).

d. Recordkeeping

CITGO shall maintain the following records for each degassing event and make them available to the Department upon request pursuant to 06-096 C.M.R. ch. 170, § 8:

- (1) CITGO's contact person name and telephone number;
- (2) Storage tank capacity;
- (3) The product most recently stored in the storage tank prior to degassing;
- (4) Volume (cubic feet) of vapor space degassed;
- (5) Type of vapor control system used;
- (6) Design control efficiency of the vapor control system;
- (7) Results of all liquid and vapor leak inspections and repairs conducted in accordance with the provisions of 06-096 C.M.R. ch. 170, § 5;
- (8) Results of testing conducted in accordance with 06-096 C.M.R. ch. 170, § 6;
- (9) Estimate of VOC emissions from the degassing event before control efficiency is applied (i.e., pre-control emissions); and
- (10) Estimate of VOC emissions from the degassing event after application of controls.

3. *Control of Petroleum Storage Facilities*, 06-096 C.M.R. ch. 171

The following is a discussion of the applicable requirements of *Control of Petroleum Storage Facilities*, 06-096 C.M.R. ch. 171, specific to CITGO's IFR tanks.

Enforceable by State-only (unless otherwise stated)

The IFR tanks are subject to the following inspection requirements regardless of the product being stored.

a. Visual Inspections.

At least once per calendar month, CITGO shall conduct a visual inspection of the roof of IFR tank through roof hatches. [06-096 C.M.R. ch. 171, § 5(B)(1)]

b. Instrument Inspections.

- (1) At least once per calendar month, CITGO shall conduct an external inspection of the internal floating roof for each IFR tank using photo ionization detection (PID) technology or, in lieu of PID technology, an LEL meter.
- (2) The inspection of the internal floating roof must measure the percent LEL inside the vapor space within three feet of the internal floating roof. The PID or LEL meter must be equipped with Teflon sample tubing of sufficient length to meet this requirement. The external inspection of the IFR tank does not include or require human entry into the confined space between the tank's floating and fixed roofs.
- (3) CITGO shall use a PID or LEL meter that logs data at 15 second intervals and for which the manufacturer has published correction factors for the VOCs in the tank to be measured.
- (4) Readings must be taken when the wind speed is no more than five miles per hour above the average wind speed for the facility location.
- (5) Readings must be conducted for a minimum of five minutes after the sample line purge is complete or in accordance with manufacturer recommendations, whichever is longer.

[06-096 C.M.R. ch. 171, § 5(B)(2)]

- c. If a leak is detected, CITGO shall initiate corrective action and repair the leak within 15 calendar days. If the leak cannot be repaired within 15 days, CITGO shall notify the Department of the leak, the reason for the delay, and the expected date of the repair. CITGO shall promptly notify the Department of the date that the leak is successfully repaired.

[06-096 C.M.R. ch. 171, § 5(B)(3)]

- d. For each IFR tank, at least once every five calendar years and each time the tank is emptied and degassed, CITGO shall conduct a complete inspection by visually inspecting the floating roof deck, deck fittings, and rim seals from within the internal floating roof tank. The inspection may be performed entirely from the top side of the floating roof as long as there is visual access to all deck components.

[06-096 C.M.R. ch. 171, § 5(B)(4)]

- e. CITGO shall notify the Department at least 30 days before an inspection is to be performed from within the internal floating roof tank. If an inspection is unplanned and the facility could not have known about the inspection 30 days in advance, then the owner or operator shall notify the Department at least seven days before the

inspection. Notification shall be made either by telephone immediately followed by written documentation demonstrating why the inspection was unplanned, or in writing only and sent such that it is received at least seven days before the inspection. [06-096 C.M.R. ch. 171, § 5(B)(5)]

4. New Source Performance Standards (NSPS)

Tanks #3, #4, and #6 are subject to 40 C.F.R. 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*. Tanks #3, #4, and #6 comply with regulation requirements by use of a floating roof. 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.

All of the other IFR tanks were constructed prior to 1973, and none have been reconstructed or modified. Therefore, they are not subject to any of the following New Source Performance Standards:

- 40 C.F.R. 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*
- 40 C.F.R. Part 60, Subpart Ka – *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction or Modification Commenced After May 18, 1978, and Prior to July 23, 1984*
- 40 C.F.R. Part 60, Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, and On or Before October 4, 2023*

All tanks at the facility were installed prior to October 15, 2024. If modified, existing storage vessels can become subject to *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After October 4, 2023*, 40 C.F.R. Part 60, Subpart Kc. Pursuant to 40 C.F.R. § 60.110c(e), a modification occurs if the storage vessel is used to store a volatile organic liquid (VOL) that has a greater maximum true vapor pressure than all VOL historically stored or permitted to be stored. CITGO's internal floating roof tanks have historically been permitted to store gasoline. Therefore, the facility's tanks are not subject to Subpart Kc provided they continue to store the products for which they are currently licensed. Citgo shall maintain records of the type and maximum true vapor pressure for each product stored in each tank. This recordkeeping requirement is added through BPT.

5. Best Practical Treatment (BPT) and New Source Review (NSR) Requirements

Air Emission License A-460-77-1-M (6/9/2008) addressed the addition of ethanol as a product to be stored in CITGO's IFR tanks and added several new requirements through best available control technology (BACT).

Additionally, an updated BPT analysis for the IFR tanks was performed as part of this renewal application. The Department determined that the standards and requirements of applicable State and Federal regulations as well as the following additional requirements represent BPT for these tanks.

- a. CITGO shall not land the roof of an IFR tank, i.e., allow the IFR to rest upon its support legs, unless:
 - (1) the most recently stored product was distillate oil, jet fuel, or kerosene; or
 - (2) the tank is subsequently degassed in accordance with 06-096 C.M.R. ch. 170; or
 - (3) CITGO is given written approval by the Department; or
 - (4) the tank changes product (e.g., from winter gas to summer gas) and this operation is limited to no more than once per calendar year. The operation of changing product may involve multiple roof landings but when undertaken, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

[06-096 C.M.R. ch. 140, BPT] Enforceable by State-only

- b. CITGO shall notify the Department at least seven days in advance of any planned degassing event, and as soon as possible for any unplanned degassing event, subject to the requirements of 06-096 C.M.R. ch. 170 and provide the following information:

- (1) Identification of the tank(s) to be degassed;
- (2) Date(s) when degassing will occur;
- (3) A description of the control device to be used and its control effectiveness; and
- (4) The parameters to be monitored during degassing.

[06-096 C.M.R. ch. 140, BPT] Enforceable by State-only

- c. If any holes, tears, or other openings are present, the source shall notify the Department in writing within 10 days of the discovery of such holes, tears, or other openings and the course of action to be taken for repair. CITGO shall demonstrate to the Department that all repairs were made as soon as practicable but no later than 30 calendar days from detection. [06-096 C.M.R. ch. 115, BACT (A-460-77-1-M, 6/9/2008)]

d. 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; [06-096 C.M.R. ch. 115, BACT (A-460-77-1-M, 6/9/2008)] and
- (2) Inspection log documenting any detected leaks, holes, tears, or other openings and the corrective action taken.
[06-096 C.M.R. ch. 115, BACT (A-460-77-1-M, 6/9/2008)]

e. Tanks #1, #6, and #7, are dual storage tanks. These tanks are equipped to store gasoline, ethanol, or gasoline/ethanol blend; however, typical storage will be distillate oil, jet fuel, or kerosene. No notification to the Department is required when products are switched. [06-096 C.M.R. ch. 115, BACT (A-460-77-1-M, 6/9/2008)]

6. Emission Limits, Streamlining, and Compliance Methods

Emissions of VOC and HAP from these tanks as well as any streamlining and compliance methods are included in the section on facility-wide limits later in this license.

7. Compliance Assurance Monitoring

CAM is not applicable to the Gasoline/Ethanol Storage Tanks.

8. Periodic Monitoring

CITGO shall record data and maintain records for the following periodic monitoring values for the IFR tanks. Additional recordkeeping requirements are included with the requirements for 40 C.F.R. Part 63, Subpart BBBBB.

- a. For each tank, records of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period; [40 C.F.R. § 60.113(a) and 06-096 C.M.R. ch. 140, BPT]
- b. Records of product stored and throughput for each tank on a monthly basis; [06-096 C.M.R. ch. 137]
- c. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 63, Subpart BBBBB (described earlier);
- d. Records of any tank degassing, including the notification provided to the Department, date and time degassing began and ended, and monitoring data

collected during degassing; [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

- e. 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; [06-096 C.M.R. ch. 115, BACT (A-460-77-1-M, 6/9/2008)]
- f. Inspection log documenting any detected leaks, holes, tears, or other openings and the corrective action taken. [06-096 C.M.R. ch. 115, BACT (A-460-77-1-M, 6/9/2008)]

9. Parameter Monitors

There are no Parameter Monitors required for the IFR tanks.

10. CEMS and COMS

There are no CEMS or COMS required for the IFR tanks.

J. Fixed Roof Tanks

The following fixed roof tanks are used to store distillate oil, jet fuel, or kerosene. Annual throughput for each tank varies depending on the product stored, size, and demand.

Storage Tank No.	Date of Installation	Capacity (gallons)	Control Equipment
Tank #2	1931	4,600,000	Fixed roof
Tank #5	1938	1,300,000	Fixed roof
Tank #8	1965	4,200,000	Fixed roof

1. New Source Performance Standards (NSPS)

All of the fixed roof tanks were constructed prior to 1973, and none have been reconstructed or modified. Therefore, they are not subject to any of the following New Source Performance Standards:

- 40 C.F.R. 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*
- 40 C.F.R. Part 60, Subpart Ka – *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction or Modification Commenced After May 18, 1978, and Prior to July 23, 1984*
- 40 C.F.R. Part 60, Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which*

Construction, Reconstruction, or Modification Commenced After July 23, 1984, and On or Before October 4, 2023

All tanks at the facility were installed prior to October 15, 2024. If modified, existing storage vessels can become subject to *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After October 4, 2023*, 40 C.F.R. Part 60, Subpart Kc. Pursuant to 40 C.F.R. § 60.110c(e), a modification occurs if the storage vessel is used to store a VOL that has a greater maximum true vapor pressure than all VOL historically stored or permitted to be stored. CITGO's fixed roof tanks have historically been permitted to store distillate fuels including jet fuel and kerosene. Therefore, the facility's tanks are not subject to Subpart Kc provided they continue to store the products for which they are currently licensed. Citgo shall maintain records of the type and maximum true vapor pressure for each product stored in each tank. This recordkeeping requirement is added through BPT.

2. Best Practical Treatment (BPT)

An updated BPT analysis for the fixed roof tanks was performed as part of this renewal application. The Department determined that the standards and requirements of applicable State and Federal regulations represent BPT for the fixed roof tanks.

3. Emission Limits, Streamlining, and Compliance Methods

Emissions of VOC and HAP from these tanks as well as any streamlining and compliance methods are included in the section on facility-wide limits later in this license.

4. *Degassing of Petroleum Storage Tanks, Marine Vessels, and Transport Vessels*, 06-096 C.M.R. ch. 170

The products stored in Tanks #2, #5, and #8 are not affected products as that term is defined in *Degassing of Petroleum Storage Tanks, Marine Vessels, and Transport Vessels*, 06-096 C.M.R. ch. 170. Therefore, 06-096 C.M.R. ch. 170 is not applicable to these tanks.

However, as a requirement of BPT, CITGO shall notify the Department at least seven days in advance of any planned degassing event, and as soon as possible for any unplanned degassing event for Tanks #2, #5, and #8. CITGO shall provide the Department with the identification of the tank to be degassed and the date(s) when degassing will occur. [06-096 C.M.R. ch. 140, BPT]

5. Control of Petroleum Storage Facilities, 06-096 C.M.R. ch. 171

Tanks #2, #5, and #8 are fixed roof tanks which store distillate oil, jet fuel, or kerosene. Since they were installed prior to the effective date of 06-096 C.M.R. ch. 171, they are not required to be retrofitted with a floating roof. [06-096 C.M.R. ch. 171, § 4(A)]

6. Compliance Assurance Monitoring

CAM is not applicable to the fixed roof tanks.

7. Periodic Monitoring

CITGO shall record data and maintain records for the following periodic monitoring values for the fixed roof tanks:

- a. For each tank, records of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period; [06-096 C.M.R. ch. 140, BPT]
- b. Records of product stored and throughput for each tank on a monthly basis; [06-096 C.M.R. ch. 137]
- c. Inspection log documenting the monthly inspections of the fixed roof tanks including the date and results of each inspection and documentation of corrective action taken. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

8. Parameter Monitors

There are no Parameter Monitors required for the fixed roof tanks.

9. CEMS and COMS

There are no CEMS or COMS required for the fixed roof tanks.

K. Marine Vessel Loading

CITGO has the capability to load marine vessels for bulk transportation of product. The Marine Vessel Loading Dock was installed prior to 1980 and is limited to the loading of 10,000,000 gal/year of gasoline, ethanol, or gasoline/ethanol blends and 45,000,000 gal/year of distillate oil, jet fuel, and kerosene, both on a 12-month rolling total basis.

1. National Emission Standards for Hazardous Air Pollutants (NESHAP)

The Marine Vessel Loading Dock is subject to *National Emission Standards for Marine Tank Vessel Loading Operations*, 40 C.F.R. Part 63, Subpart Y. CITGO is classified as

an existing source with emissions less than 10 tpy of any single HAP and less than 25 tpy for all HAP combined. CITGO's marine vessel loading operations also classified it as a source with a throughput less than 10 million barrels of gasoline annually.

Due to the facility's classification, it is not subject to the emission standards in 40 C.F.R. §§ 63.562(b), (c), and (d). [40 C.F.R. §§ 63.560(a)(2) and (b)(2)]

This regulation does not apply to the loading of marine vessels with distillate oil. [40 C.F.R. § 63.560(d)(1)]

CITGO shall comply with all applicable requirements of 40 C.F.R. Part 63, Subpart Y including, but not limited to, the following:

- a. CITGO shall meet the submerged fill standards of 46 C.F.R. § 153.282. [40 C.F.R. § 63.560(a)(4)]
- b. CITGO shall calculate annual emissions of HAP from the marine loading of gasoline. Emission estimates and emission factors shall be based on test data, or if test data is not available, shall be based on measurement or estimating techniques approved by the Department. [40 C.F.R. § 63.565(l)]
- c. CITGO shall retain records of emission estimates and records of actual throughput by product for 5 years. [40 C.F.R. § 63.567(j)(4)]
[Note: All records must be kept for a period of 6 years pursuant to Standard Condition (6) of this air emission license.]

2. Best Practical Treatment (BPT)

An updated BPT analysis for Marine Vessel Loading was performed as part of this renewal application. The Department determined that the standards and requirements of applicable State and Federal regulations as well as the following additional requirements represent BPT for this operation.

- a. CITGO shall not exceed a petroleum product throughput of 10,000,000 gallons of gasoline, ethanol, or gasoline/ethanol blends and 45,000,000 of distillate oil, jet fuel, or kerosene (based on a 12-month rolling total) through the Marine Vessel Loading Dock.
- b. CITGO shall conduct routine inspections of the Marine Vessel Loading Dock piping and transfer lines at a minimum of once every month.
- c. The Marine Vessel Loading Dock shall utilize a vapor combustion system that captures and controls displaced VOC vapors whenever gasoline, ethanol, or a gasoline ethanol blend is being transferred to a marine vessel. This vapor

combustion system shall be designed to achieve a VOC destruction efficiency of at least 95%.

- d. CITGO shall record data and maintain records for the following periodic monitoring values for the Marine Vessel Loading Dock when in operation:
 - (1) Inspection log documenting routine monthly inspections of piping and transfer lines to include any leaks and the schedule for repair; and
 - (2) Monthly throughput specifying quantity and types of product transferred.
3. Emission Limits, Streamlining, and Compliance Methods

Emissions of VOC and HAP from this operation as well as any streamlining and compliance methods are included in the section on facility-wide limits later in this license.
4. Compliance Assurance Monitoring

CAM is not applicable to Marine Vessel Loading.
5. Periodic Monitoring

CITGO shall record data and maintain records for the following periodic monitoring values for Marine Vessel Loading when in operation:

 - a. Hours of operation on a monthly and calendar year basis. [06-096 C.M.R ch. 137]
 - b. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 63, Subpart Y (described earlier);
 - c. Recordkeeping in accordance with the requirements of 06-096 C.M.R. ch. 140, BPT (described earlier);
 - d. Records of throughput for each product on a monthly basis.
[06-096 C.M.R. ch. 137]
6. Parameter Monitors

There are no Parameter Monitors required for Marine Vessel Loading.
7. CEMS and COMS

There are no CEMS or COMS required for Marine Vessel Loading.

L. Facility-Wide Annual Emission Limits

CITGO is subject to the following facility-wide annual emission limits established through BACT in NSR license A-460-77-1-M (6/9/2008):

Pollutant	Emission Limit (tpy)
NO _x	34.0
CO	185.0
VOC	117.3
Total HAP	5.0

Potential to emit (PTE) emissions of NO_x and CO from the VCU have since been recalculated based on the licensed emission limits for NO_x and CO (in pounds per 1,000 gallons of product loaded) and the licensed maximum throughput for both the Loading Rack and Marine Vessel Loading. The recalculated PTE for NO_x is 16.6 tpy and for CO is 41.7 tpy. Therefore, the previously licensed annual limits for NO_x and CO are considered obsolete and are not included in the Order section of this license.

Additionally, CITGO has requested a reduction in the facility-wide VOC emission limit from 117.3 tpy to 104.4 tpy. This change reflects a reduction in the facility's PTE due to added control requirements at the Marine Vessel Loading Dock and a recalculation of PTE for other equipment.

Accordingly, CITGO is also subject to the following facility-wide emission limits established under BPT:

Pollutant	Emission Limit (tpy)
VOC	104.4
Total HAP	5.0

Enforceable by State-only

The Department has determined that the BPT limits are more stringent than the previous BACT limits. Therefore, the facility-wide annual emission limits have been streamlined to the more stringent BPT limits, and only these more stringent limits shall be included in the Order section of this air emission license. Streamlining the BPT limits with the Federally-enforceable limits in A-460-77-1-M makes the BPT limits Federally enforceable.

The VOC and HAP limits include emissions from all licensed emissions equipment and processes, including emissions from the petroleum storage tanks, facility piping, the Loading Rack, and Marine Vessel Loading. In addition to emissions from normal operation, emissions from both routine and non-routine maintenance activities shall be included, such as roof landings, tank degassing, and tank cleaning.

The scope of these emission limitations does not include emissions from non-licensed equipment or processes which are considered insignificant activities pursuant to 06-096 C.M.R. ch. 140, Appendix B.

1. Compliance Demonstration

Compliance with the facility-wide annual VOC emission limit shall be demonstrated by calculating actual emissions at least once annually as required by *Emission Statements*, 06-096 C.M.R. ch. 137. Similarly, compliance with the facility-wide annual HAP emission limits shall be demonstrated at least once every three years as required by 06-096 C.M.R. ch. 137. However, CITGO shall maintain records necessary to calculate annual VOC and HAP emissions for any consecutive 12-month period and shall provide a demonstration of compliance with the facility-wide VOC/HAP emission limits for any consecutive 12-month period upon request by the Department.

Actual emissions shall be calculated as follows with all emissions summed to provide an annual total:

a. Petroleum Storage Tanks

VOC and HAP emissions from the petroleum storage tanks shall be calculated in accordance with the methodology contained in the most current version of EPA's Compilation of Air Emission Factors (AP-42), Fifth Edition, Volume 1, Chapter 7, *Liquid Storage Tanks*.

b. Tank Maintenance

Emissions from tank maintenance (both planned and unplanned), including roof landings, tank degassing, and tank cleaning, shall be included when calculating the facility's annual facility-wide VOC and HAP emissions. Emissions from these operations shall be calculated in accordance with the methodology contained in the most current version of AP-42, Fifth Edition, Volume 1, Chapter 7 and taking into account the control efficiency of any control equipment approved by the Department for use.

c. Facility Piping

Operation of the facility's equipment will result in fugitive emissions of VOC and HAP from the terminal's piping. CITGO shall keep an updated inventory of system components (e.g., valves, pump seals, connectors, flanges, etc.) and calculate fugitive emissions using emission factors obtained from EPA's *Protocol for Equipment Leak Emission Estimates*, EPA-453/R-95-017, dated November 1995.¹

¹<https://www3.epa.gov/ttnchie1/efdocs/equiplks.pdf>

d. Loading Rack and Marine Vessel Loading

In accordance with the preamble to 40 C.F.R. Part 63, Subpart R published in the Federal Register on December 14, 1994, fugitive VOC emissions from the Loading Rack are assumed to be 1.3% of the vapors displaced during loading.

Emissions of VOC from the collected gases sent to the VCU shall be based on data from the most recent performance test. Emissions of HAP shall be determined based on the mass of VOC emissions from the most recent performance test and speciation data from AP-42.

2. Recordkeeping Requirements

CITGO shall keep the following records in order to calculate emissions as described above for compliance demonstration with the facility-wide annual VOC and HAP emission limits:

- a. Monthly throughput for each petroleum storage tank;
- b. Monthly throughput of each product at the Loading Rack;
- c. Monthly throughput of each product for Marine Vessel Loading;
- d. Equipment and product information necessary to calculate emissions from the petroleum storage tanks in accordance with AP-42, Chapter 7;
- e. Process and product information necessary to calculate emissions from tank maintenance operations in accordance with AP-42, Chapter 7; and
- f. Equipment and product information necessary to calculate emissions from facility piping in accordance with EPA's *Protocol for Equipment Leak Emission Estimates*.

M. Portable Engines

CITGO may operate portable engines on-site for maintenance and emergency-only purposes. Depending on their size and age, these engines may be subject to *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101 and *Fuel Burning Equipment Particulate Emission Standard*, 06-096 C.M.R. ch. 103.

Any engine which cannot meet the definition of "portable engine" as defined by this license may be subject to additional State and Federal regulations. A license amendment may be necessary for a portable engine to be reclassified as a stationary engine.

N. Emission Statements

CITGO is subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. CITGO shall maintain the following records in order to comply with this rule:

1. The capacity of each petroleum storage tank;
2. Monthly throughput of each petroleum storage tank;
3. Monthly throughput of each product at the Loading Rack;
4. Monthly throughput of each product for Marine Vessel Loading;
5. Monthly propane usage for the VCU;
6. Calculations of the facility-wide VOC and HAP emissions on a calendar year total basis; and
7. Hours each emission unit was active or operating on a monthly basis.

Every third year, or as requested by the Department, CITGO shall report to the Department emissions of hazardous air pollutants as required pursuant to 06-096 C.M.R. ch. 137, § (3)(C). The next report is due no later than May 15, 2027, for emissions occurring in calendar year 2026. The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. CITGO shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

O. Facility Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on the following assumptions:

- Throughput for the Loading Rack of 635,000,000 gal/year of any combination of gasoline and ethanol, 350,000,000 gal/year of distillate oil (including jet fuel and kerosene), and 590,000 gal/year of additives;
- Throughput for the Marine Vessel Loading Dock of 10,000,000 gal/year of any combination of gasoline, ethanol, or gasoline/ethanol blends and 45,000,000 gal/year of distillate oil, jet fuel, and kerosene; and
- Facility-wide annual emission limits for VOC and HAP

This information does not represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

Total Licensed Annual Emissions for the Facility

Tons/year

(used to calculate the annual license fee)

	PM	NO_x	CO	VOC	Total HAP
VCU	0.2	16.6	41.6	—	—
Facility-Wide Limit	—	—	—	104.4	5.0
Total TPY	0.2	16.6	41.6	104.4	5.0

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 C.M.R. ch. 140, 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	50
CO	250

Based on facility license allowed emissions, CITGO is below the emissions level required for an ambient air quality analysis.

ORDER

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

- will receive Best Practical Treatment;
- will not violate applicable emissions standards; and
- 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-H-R pursuant to 06-096 C.M.R. ch. 140 and the preconstruction permitting requirements of 06-096 C.M.R. ch. 115 and subject to the standard and specific 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 have been incorporated into this Part 70 license, except for such conditions that the Department has determined are obsolete, extraneous, or otherwise environmentally insignificant, as explained in

the Findings of Fact accompanying this Order. As such, the conditions in this license supersede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115 for making such changes and pursuant to the applicable requirements in 06-096 C.M.R. ch. 140.

For each standard and specific 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 of this License or part thereof shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

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. [06-096 C.M.R. ch. 140]
- (2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 140]
- (3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable. [06-096 C.M.R. ch. 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.
[06-096 C.M.R. ch. 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. [06-096 C.M.R. ch. 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 affect 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.

Permit Shield Table

Source	Citation	Description	Basis for Determination
Facility	06-096 C.M.R. ch. 138	NO _x RACT	Facility does not have the potential to emit more than 100 tpy of NO _x .
Facility	40 C.F.R. Part 60, Subpart J	NSPS for Petroleum Refineries	Facility is not a petroleum refinery.
Facility	40 C.F.R. Part 60, Subpart Ja	NSPS for Petroleum Refineries	Facility is not a petroleum refinery.
Petroleum Storage Tanks	40 C.F.R. Part 60, Subpart Ka	NSPS for Storage Vessels for Petroleum Liquids	Units were constructed prior to the applicability date.
Petroleum Storage Tanks	40 C.F.R. Part 60, Subpart Kb	NSPS for Volatile Organic Liquid Storage Vessels	Units were constructed prior to the applicability date.
Petroleum Storage Tanks	40 C.F.R. Part 60, Subpart Kc	NSPS for Volatile Organic Liquid Storage Vessels	Units were constructed prior to the applicability date.
Facility	40 C.F.R. Part 60, Subpart GGG	NSPS for Equipment Leaks of VOC in Petroleum Refineries	Facility is not a petroleum refinery.
Facility	40 C.F.R. Part 63, Subpart R	NESHAP for Gasoline Distribution Facilities	Facility is not a major source of HAP.
Facility	40 C.F.R. Part 63, Subpart CC	NESHAP for Petroleum Refineries	Facility is not a petroleum refinery.
Facility	40 C.F.R. Part 63, Subpart HH	NESHAP for Oil and Natural Gas Production Facilities	Facility is not an oil or natural gas production facility.

Source	Citation	Description	Basis for Determination
Facility	40 C.F.R. Part 63, Subpart HHH	NESHAP for Natural Gas Transmission and Storage Facilities	Facility is not a natural gas transmission or storage facility.
Facility	40 C.F.R. Part 63, Subpart EEEE	NESHAP for Organic Liquids Distribution (Non-Gasoline)	Facility is not a major source of HAP.
Facility	40 C.F.R. Part 64	Compliance Assurance Monitoring	Facility has no applicable emission units.
Facility	40 C.F.R. Part 68	Chemical Accident Prevention Provisions	Exempt pursuant to 40 C.F.R. § 68.115(b)(2)(ii).
Facility	40 C.F.R. Part 98	Mandatory Greenhouse Gas Reporting	Facility does not meet applicability requirements.

[06-096 C.M.R. ch. 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 three 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 06-096 C.M.R. ch. 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.

[06-096 C.M.R. ch. 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. [06-096 C.M.R. ch. 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 (38 M.R.S. § 347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in 06-096 C.M.R. ch. 140. [06-096 C.M.R. ch. 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. [06-096 C.M.R. ch. 140]
Enforceable by State-only
- (4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to 38 M.R.S. § 353-A. Payment of the annual air emission license fee for CITGO is due by the end of November of each year. [38 M.R.S. § 353-A(3)]
- (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. [06-096 C.M.R. ch. 140]
Enforceable by State-only
- (6) 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. In addition, 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. [06-096 C.M.R. ch. 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. [06-096 C.M.R. ch. 140]

(8) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department, the licensee shall:

- A. Perform stack testing 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 C.F.R. Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
- C. Submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 C.M.R. ch. 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 C.F.R. Part 60 or other method approved or required by the Department; and
- B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
- C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 C.M.R. ch. 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 M.R.S. § 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.

[06-096 C.M.R. ch. 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.

[06-096 C.M.R. ch. 140]

(12) The licensee shall submit semiannual reports of any required periodic monitoring by January 31 and July 31 of each year, or on an equivalent schedule specified in the license. 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.

[06-096 C.M.R. ch. 140]

(13) The licensee shall submit a compliance certification to the Department and EPA annually by January 31 of each year, 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.

The facility's designated responsible official must sign this report. 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.

[06-096 C.M.R. ch. 140]

SPECIFIC CONDITIONS

(14) Loading Rack

A. Throughput Limits

1. CITGO shall not exceed a petroleum product throughput at the loading rack as follows (based on a 12-month rolling total):

Product	Throughput Limit
gasoline/ethanol	635,000,000 gallons
distillate oil, jet fuel, kerosene	350,000,000 gallons
additives	590,000 gallons

[06-096 C.M.R. ch. 115, BACT (A-460-77-1-M, 6/9/2008)]

2. The Loading Rack shall not exceed a product loading rate of 13,440 gallons per minute. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**
3. CITGO shall not exceed a propane use of 400,000 gallons per 12-month period as auxiliary fuel to the VCU. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

B. CITGO shall comply with all applicable requirements of the most current version of 40 C.F.R. Part 60, Subpart XX, including but not limited to those listed in this air emission license. Should EPA adopt changes to this regulation, the requirements associated with 40 C.F.R. Part 60, Subpart XX included in this Order shall expire. CITGO shall apply to amend this air emission license to address applicable requirements from the updated regulation within 60 days of publication of the final rule in the Federal Register. [40 C.F.R. § 70.6(c)(1)]

C. Control Requirements

1. The Loading Rack shall be equipped and maintained with a vapor collection system designed to collect the displaced VOC vapors whenever gasoline is being transferred to a tank truck. [06-096 C.M.R. ch. 112, § 3(B), 40 C.F.R. § 60.502(a), and 40 C.F.R. Part 63, Subpart BBBB, Table 2]
2. Liquid petroleum product shall not be loaded into any tank truck or trailer whose most recent previous load was gasoline unless vapors displaced from the tank truck or trailer are captured and routed to the VCU. The vapor collection and VOC control systems shall be maintained in good working order and must be operated at all times product is being transferred to such tank trucks or trailers.
[06-096 C.M.R. ch. 171, § 4(C)(1)] **Enforceable by State-only**
3. CITGO shall not allow loading of gasoline into tank trucks and trailers unless they have been certified pursuant to 40 C.F.R. Part 60, Appendix A, Method 27 and labeled as specified in 06-096 C.M.R. ch. 120, § 3(A)(2).
[06-096 C.M.R. ch. 120, § 3(A)]
4. CITGO shall operate the vapor collection system to prevent any TOC vapors collected at one loading lane from passing through another lane to the atmosphere.
[40 C.F.R. § 60.502(d) and 40 C.F.R. Part 63, Subpart BBBB, Table 2]
5. Loading of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline trucks using the procedures specified in 40 C.F.R. § 60.502(e) and those which have been certified within the last 12 months as vapor-tight pursuant to 06-096 C.M.R. ch. 120. [06-096 C.M.R. ch. 112, § 3(A), 40 C.F.R. § 60.502(e) and 40 C.F.R. Part 63, Subpart BBBB, Table 2]
6. CITGO shall act to assure that loading of gasoline tank trucks at the facility are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system. [40 C.F.R. § 60.502(f)]
7. CITGO shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck at the affected facility. Examples of actions to accomplish this include training drivers in the

hookup procedures and posting visible reminder signs at the affected loading racks.
[40 C.F.R. § 60.502(g)]

8. All loading and vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected.
[06-096 C.M.R. ch. 112, § 3(D) and 06-096 C.M.R. ch. 171, § 4(C)(2)]
9. The vapor control system at the Loading Rack shall be designed and operated such that during loading operations:
 - a. The tank compartments of the tank truck shall not be subjected to a gauge pressure exceeding 18 inches of water or a vacuum exceeding 6 inches of water;
 - b. Readings equal to or greater than 100% of the lower explosive limit (LEL) shall not be obtained within 1 inch around any potential leak source of the tank truck including all loading couplings and vapor lines and fittings employed in transferring gasoline to the tank truck; and
 - c. There shall be no visible or audible liquid or vapor leaks in the vicinity of the Loading Rack.
[06-096 C.M.R. ch. 120, § 3(C)]
10. If the vapor collection system exceeds any of the limits listed in (9) above, CITGO shall repair and retest the system within fifteen (15) days. Records of all repairs and retests shall be maintained and available for inspection by the Department during normal business hours and copies shall be provided to the Department upon request.
[06-096 C.M.R. ch. 120, § 3(D)]
11. The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 pascals (450 mm of water) during product loading. Additionally, the pressure in the vapor collection system shall not exceed the tank truck pressure relief settings.
[40 C.F.R. § 60.502(h), 06-096 C.M.R. ch. 112, § 3(E), and 06-096 C.M.R. ch. 171, § 4(C)(3)]
12. No pressure-vacuum vent in the vapor collection system shall begin to open at a system pressure less than 4,500 pascals (450 mm of water). [40 C.F.R. § 60.502(i)]
13. CITGO shall prevent liquid drainage from the loading device when it is not in use.
[06-096 C.M.R. ch. 112, § 3(C)]
14. CITGO shall not allow gasoline to be discarded in sewers, stored in open containers, or otherwise handled in any manner that would result in evaporation.
[06-096 C.M.R. ch. 112, § 3(E)]

D. Equipment Inspections

Each calendar month, the vapor collection system, the VCU, and the Loading Rack shall be inspected during the loading of gasoline tank trucks for liquid or vapor leaks. Detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within fifteen (15) calendar days after it is detected. [40 C.F.R. § 60.502(j)]

E. Emission Limits

(Emission limits are on a 1-hour block average basis.)

1. Emissions from the VCU shall not exceed the following limits:

Pollutant	Limit	Origin and Authority	Enforceability
PM	0.2 lb/1,000 gal of product in process gases burned	06-096 C.M.R. ch. 140, BPT	Federally Enforceable
NO _x	0.0334 lb/1,000 gal of product loaded	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
CO	0.0835 lb/1,000 gal of product loaded	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
VOC	35 mg/liter of product loaded	06-096 C.M.R. ch. 112, § 4(a) & 40 C.F.R. Part 60, Subpart XX, § 60.502(b)	Federally Enforceable
	10 mg/liter of product loaded	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only

2. Visible emissions from the VCU shall not exceed 30% opacity on a six-minute block average basis, except that for periods of startup, shutdown, and malfunction CITGO may elect to comply with the work practice standards listed in 06-096 C.M.R. ch. 101, § 4(A). [06-096 C.M.R. ch. 101, § 3(A)(6)]
3. Visible emissions from the VCU shall not exceed 5% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 140, BPT (A-460-70-A-I, 4/9/2002)]
Enforceable by State-only

F. Compliance Methods

Compliance with the emission limits listed above shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 C.M.R. ch. 140]:

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu	40 C.F.R. Part 60, Appendix A, Method 5	As requested
NO _x	lb/1,000 gal of product loaded	40 C.F.R. Part 60, Appendix A, Method 7E	As requested
CO	lb/1,000 gal of product loaded	40 C.F.R. Part 60, Appendix A, Method 10	As requested
VOC	mg/liter of product loaded	40 C.F.R. Part 60, Subpart XX, § 60.503	Annually, prior to May 15 th of each year
Visible Emissions	% opacity on a 6-minute block average basis	40 C.F.R. Part 60, Appendix A, Method 9	As requested

G. Periodic Monitoring

CITGO shall record data and maintain records for the following periodic monitoring values for the Loading Rack and VCU whenever the equipment is operating. Additional recordkeeping requirements are included with the requirements for 40 C.F.R. Part 63, Subpart BBBB

1. Hours of operation on a monthly and calendar year basis; [06-096 C.M.R ch. 137]
2. Gallons of propane used in the VCU on a monthly and 12-month rolling total basis; [06-096 C.M.R. ch. 137]
3. Gallons of throughput at the loading rack for each product stored on a monthly and 12-month rolling total basis; [06-096 C.M.R. ch. 137]
4. Records of monthly leak inspections required under 40 C.F.R. § 60.502(j) pursuant to 40 C.F.R. §§ 60.505(c) and (e);
5. For each exceedance of the operational limits in 06-096 C.M.R. ch. 120, records of all repairs and retests of the vapor control system; and [06-096 C.M.R. ch. 120, § 3(D)]
6. Records of any maintenance activities performed (planned or unplanned) on the VCU. [40 C.F.R. § 70.6(c)(1)]

H. Parameter Monitors

CITGO shall install, calibrate, certify, operate, and maintain a CMS for the VCU pursuant to 40 C.F.R. § 63.11092(b)(1)(iii)(B) which measures the presence of pilot flame. The VCU CMS is considered a parameter monitor.

(15) Internal Floating Roof Tanks

A. Tanks #1, #6, and #7, are dual storage tanks. These tanks are equipped to store gasoline, ethanol, or gasoline/ethanol blend; however, typical storage will be distillate oil, jet fuel, or kerosene. No notification to the Department is required when products are switched. [06-096 C.M.R. ch. 115, BACT (A-406-77-1-M, 6/9/2008)]

B. All IFR tanks shall be equipped, maintained, and operated such that:

1. There is an IFR with closure seal(s) between the roof edge and the tank wall. Each IFR shall be equipped with either a liquid-mounted seal or a mechanical shoe seal. [06-096 C.M.R. ch. 111, § 3(A)(1) and 40 C.F.R. § 63.1063(a)]
2. Each IFR shall float on the stored liquid surface at all times, except when the floating roof is supported by its leg supports or other support devices. [40 C.F.R. § 63.1063(b)(1)]
3. CITGO shall not land the roof of an IFR tank, i.e., allow the IFR to rest upon its support legs, unless:
 - a. the most recently stored product was distillate oil, jet fuel, or kerosene; or
 - b. the tank is subsequently degassed in accordance with 06-096 C.M.R. ch. 170; or
 - c. CITGO is given written approval by the Department; or
 - d. the tank changes product (e.g., from winter gas to summer gas) and this operation is limited to no more than once per calendar year. The operation of changing product may involve multiple roof landings but when undertaken, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

[06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

4. When an IFR is storing liquid, but the liquid depth is insufficient to float the floating roof, the process of filling to the point of refloating the IFR shall be continuous and shall be performed as soon as practical. [40 C.F.R. § 63.1063(b)(2)]
5. The IFR and closure seal(s) shall be maintained such that there are no holes, tears, or other openings in the seal or between the seal and the floating roof.
[06-096 C.M.R. ch. 111, § 3(A)(2)]

6. All storage tank openings, except stub drains, are equipped with covers, lids or seals. Each cover over an opening in an IFR, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall be closed at all times, except when the cover must be open for access. [06-096 C.M.R. ch. 111, § 3(A)(3) and 40 C.F.R. § 63.1063(b)(3)]
7. Each automatic bleeder vent (vacuum breaker vent) and rim space vent shall be closed at all times, except when required to be open to relieve excess pressure or vacuum, in accordance with the manufacturer's design. [06-096 C.M.R. ch. 111, § 3(A)(3) and 40 C.F.R. § 63.1063(b)(4)]
8. Each unslotted guidepole cap shall be closed at all times except when gauging the liquid level or taking liquid samples. [40 C.F.R. § 63.1063(b)(5)]
9. If any holes, tears, or other openings are present, CITGO shall notify the Department in writing within 10 days of the discovery of such holes, tears or other openings and the course of action to be taken for repair. CITGO shall demonstrate to the Department that all repairs were made as soon as practicable, but no later than 30 calendar days from detection. [06-096 C.M.R. ch. 115, BACT (A-460-77-1-M, 6/9/2008)]

C. Tank Degassing

CITGO shall comply with all requirements of 06-096 C.M.R. ch. 170 applicable to the IFR tanks including, but not limited to, the following:

Enforceable by State-only

1. Control Requirements [06-096 C.M.R. ch. 170, § 4 unless otherwise noted]
 - a. When emptying and degassing a storage tank whose most recently stored product was gasoline, ethanol, or gasoline/ethanol blend, CITGO shall:
 - (1) To the extent practicable, empty the storage tank of product; and
 - (2) Exhaust the vapor space of the storage tank to a vapor control system designed to achieve a VOC control efficiency of at least 95% until the VOC concentration is less than 5,000 ppmv, measured as methane, or is 10% or less of the lower explosive limit (LEL), as methane, for at least one hour.

Compliance shall be demonstrated through continuous monitoring of the VOC concentration in the line between the storage tank being degassed and the vapor control device. [06-096 C.M.R. ch. 170, § 7(B)]

- b. The probe inlet of the monitoring instrument shall be located in the line between the tank or vessel being degassed and the control device or other location as approved by the Department. [06-096 C.M.R. ch. 170, § 6]
- c. The monitoring device shall be calibrated, maintained, and operated according to the manufacturer's instructions. [06-096 C.M.R. ch. 170, § 7(A)]
- d. The vapor control system used in the degassing process shall be free of liquid and vapor leaks. This includes, but is not limited to, the degassing equipment, vacuum truck, pumps, hoses, and connections.
- e. Any visible or audible liquid or vapor leak originating from the vapor control device or other associated product recovery device shall be repaired as soon as possible.
- f. CITGO shall comply with the following to control emissions from any sludge removed from a storage tank containing, or which most recently contained, gasoline, ethanol, or gasoline/ethanol blend. These requirements do not apply when sludge is immediately transferred (e.g., pumped) to a floating roof tank whose roof is not resting on its legs.

 - (1) During sludge removal, CITGO shall vent emissions from the vessel receiving the sludge to a vapor control system designed to achieve a VOC control efficiency of at least 95%;
 - (2) The removed sludge must be transported in containers that are vapor-tight and free of liquid leaks; and
 - (3) Until final disposal, removed sludge must be stored in containers that are vapor-tight and free of liquid leaks or in tanks that are vented to a vapor control system designed to achieve a VOC control efficiency of at least 95%.

2. Inspection Requirements [06-096 C.M.R. ch. 170, §§ 5 and 6]

During a degassing event of a storage tank whose most recently stored product was gasoline, ethanol, or gasoline/ethanol blend, CITGO shall:

- a. At least once per calendar day, inspect the vapor control system for liquid and vapor leaks. To check for vapor leaks, the owner or operator shall use photo ionization detection (PID) technology or flame ionization detection (FID) technology.

Measurement of VOC concentrations shall be conducted in accordance with 40 C.F.R. Part 60, Appendix A, Method 21, using an appropriate analyzer calibrated with methane at a frequency and method as recommended by the manufacturer, at a distance of one inch (2.54 cm) or less from the source. Alternate test methods may be allowed upon written approval by the Department.

- b. If a liquid or vapor leak is observed, degassing must be discontinued within two hours of leak observance unless the leak is repaired or discontinuing degassing would present an imminent safety hazard.
3. During times the vapor control system is in use, CITGO shall monitor and record the operational parameters necessary to demonstrate the proper functioning of the vapor control system in accordance with the requirements of 06-096 C.M.R. ch. 170, § 7(C).
4. Recordkeeping

CITGO shall maintain the following records for each degassing event and make them available to the Department upon request pursuant to 06-096 C.M.R. ch. 170, § 8:

- a. CITGO's contact person name and telephone number;
b. Storage tank capacity;
c. The product most recently stored in the storage tank prior to degassing;
d. Volume (cubic feet) of vapor space degassed;
e. Type of vapor control system used;
f. Design control efficiency of the vapor control system;
g. Results of all liquid and vapor leak inspections and repairs conducted in accordance with the provisions of 06-096 C.M.R. ch. 170, § 5;
h. Results of testing conducted in accordance with 06-096 C.M.R. ch. 170, § 6;
i. Estimate of VOC emissions from the degassing event before control efficiency is applied (i.e., pre-control emissions); and
j. Estimate of VOC emissions from the degassing event after application of controls.
5. CITGO shall notify the Department at least seven days in advance of any planned degassing event, and as soon as possible for any unplanned degassing event, subject to the requirements of 06-096 C.M.R. ch. 170 and provide the following information:
 - a. Identification of the tank(s) to be degassed;
 - b. Date(s) when degassing will occur;
 - c. A description of the control device to be used and its control effectiveness; and

d. The parameters to be monitored during degassing.
[06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

D. Equipment Inspections

1. Routine inspections of floating roofs shall be conducted through roof hatches once every month. [06-096 C.M.R. ch. 111, § 3(A)(4) and 06-096 C.M.R. ch. 171, § 5(B)(1)]
2. Instrument Inspections
 - a. At least once per calendar month, CITGO shall conduct an external inspection of the internal floating roof for each IFR tank using photo ionization detection (PID) technology or, in lieu of PID technology, an LEL meter.
 - b. The inspection of the internal floating roof must measure the percent LEL inside the vapor space within three feet of the internal floating roof. The PID or LEL meter must be equipped with Teflon sample tubing of sufficient length to meet this requirement. The external inspection of the IFR tank does not include or require human entry into the confined space between the tank's floating and fixed roofs.
 - c. CITGO shall use a PID or LEL meter that logs data at 15 second intervals and for which the manufacturer has published correction factors for the VOCs in the tank to be measured.
 - d. Readings must be taken when the wind speed is no more than five miles per hour above the average wind speed for the facility location.
 - e. Readings must be conducted for a minimum of five minutes after the sample line purge is complete or in accordance with manufacturer recommendations, whichever is longer.

[06-096 C.M.R. ch. 171, § 5(B)(2)] **Enforceable by State-only**

3. Each IFR tank shall be completely emptied and degassed every 10 years. At such time, CITGO shall perform an inspection by visually inspecting the floating roof deck, deck fittings, and rim seals from within the storage vessel. The inspection may be performed entirely from the top side of the floating roof, as long as there is visual access to all deck components. [06-096 C.M.R. ch. 111, § 3(A)(5)]
4. For each IFR tank, at least once every five calendar years and each time the tank is emptied and degassed, CITGO shall conduct a complete inspection by visually inspecting the floating roof deck, deck fittings, and rim seals from within the

internal floating roof tank. The inspection may be performed entirely from the top side of the floating roof as long as there is visual access to all deck components. [06-096 C.M.R. ch. 171, § 5(B)(5)] **Enforceable by State-only**

5. If any of the following conditions are discovered during the inspection described in (2) above, CITGO shall repair the items as necessary so that none of the conditions exist before refilling. [40 C.F.R. § 63.1063(d)]
 - (a) Stored liquid on the floating roof;
 - (b) Holes or tears in the primary or secondary seal (if one is present);
 - (c) Floating roof deck, deck fittings, or rim seals that are not functioning as designed;
 - (d) Failure to comply with the operational requirements of 40 C.F.R. § 63.1063(b); or
 - (e) Gaps of more than 0.32 centimeters (1/8 inch) between any deck fitting gasket, seal, or wiper (required by 40 C.F.R. § 63.1063(a)) and any surface that it is intended to seal.
6. CITGO shall notify the Department at least 30 days before an inspection performed from within the storage vessel. If an inspection is unplanned and CITGO could not have known about the inspection 30 days in advance, then CITGO shall notify the Department at least seven (7) days before the inspection. Notification shall be made either by telephone immediately followed by written documentation demonstrating why the inspection was unplanned or in writing only and sent such that it is received at least seven (7) days before the inspection. [40 C.F.R. § 63.1066(b)(1)]

E. Periodic Monitoring

CITGO shall record data and maintain records for the following periodic monitoring values for the IFR tanks. Additional recordkeeping requirements are included with the requirements for 40 C.F.R. Part 63, Subpart BBBB.

1. For each tank, records of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period; [40 C.F.R. § 60.113(a) and 06-096 C.M.R. ch. 140, BPT]
2. Records of product stored and throughput for each tank on a monthly basis; [06-096 C.M.R. ch. 137]
3. Records of the dimensions of each IFR storage vessel, an analysis of the capacity of the storage vessel, and an identification of the liquid stored; [40 C.F.R. § 63.1065(a)]
4. 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; [06-096 C.M.R. ch. 115, BACT (A-460-77-1-M, 6/9/2008)]

5. The following information shall also be included in the inspection log:
 - a. Identification of the storage vessel that was inspected.
 - b. The date of the inspection.
 - c. A description of all inspection failures (if applicable).
 - d. A description of all repairs and the dates they were made (if applicable).
 - e. The date the storage vessel was removed from service (if applicable).

[40 C.F.R. § 63.1065(b)(1)]
6. Inspection log documenting any detected leaks, holes, tears, or other openings and the corrective action taken; [06-096 C.M.R. ch. 115, BACT (A-460-77-1-M, 6/9/2008)]
7. Records of any tank degassing, including the notification provided to the Department, date and time degassing began and ended, and monitoring data collected during degassing; and [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**
8. For each IFR vessel of the dates when the IFR was set on its legs or other support devices as well as the dates when the roof was refloated. The records shall indicate whether the process of refloating was continuous. [40 C.F.R. § 63.1065(c)]

(16) **40 C.F.R. Part 63, Subpart BBBB**

CITGO shall comply with all applicable requirements of the most current version of 40 C.F.R. Part 63, Subpart BBBB, including but not limited to those listed in this air emission license. Below are the requirements of this regulation as of the date of this air emission license. Should EPA adopt changes to this regulation, the requirements listed below for 40 C.F.R. Part 63, Subpart BBBB, shall expire. CITGO shall apply to amend this air emission license to address applicable requirements from the updated regulation within 60 days of publication of the final rule in the Federal Register. [40 C.F.R. § 70.6(c)(1)]

CITGO shall continuously comply with all applicable requirements of the most current version of *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities*, 40 C.F.R. Part 63, Subpart BBBB, including, but not limited to, those listed in this air emission license. Below are the requirements of this regulation as of the date of this air emission license.

Should EPA adopt changes to this regulation that result in new or modified applicable requirements, the requirements associated with 40 C.F.R. Part 63, Subpart BBBB included in this Order shall expire, except for the general requirement to continuously comply with the most current version of the regulation. CITGO shall apply to reopen this air emission license to update the applicable requirements within 60 days of publication of the final rule in the Federal Register. [06-096 C.M.R. ch. 140, BPT]

A. General Requirements

1. CITGO must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require CITGO to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.11085(a)]
2. CITGO shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
 - a. Minimize gasoline spills;
 - b. Clean up spills as expeditiously as practicable;
 - c. Cover all open gasoline containers and gasoline storage tank fill-pipes with a gasketed seal when not in use; and
 - d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.[40 C.F.R. § 63.11085(b)]

B. Emission Limits and Management Practices for Storage Tanks

Tanks #1, #3, #4, #6, #7, #9, and #10 are subject to the following requirements when storing gasoline.

1. The IFR tanks must be equipped and operated pursuant to 40 C.F.R. §§ 63.1063(a)(1) and (b), except for the secondary seal requirements under §§ 63.1063(a)(1)(i)(C) and (D), as described below. [40 C.F.R. Part 63, Subpart BBBBBB, Table 1, Row 2(e)]
 - a. Each IFR shall be equipped with either a liquid-mounted seal or a mechanical shoe seal. [40 C.F.R. § 63.1063(a)]
 - b. Each IFR shall float on the stored liquid surface at all times, except when the floating roof is supported by its leg supports or other support devices. [40 C.F.R. § 63.1063(b)(1)]
 - c. When an IFR is storing liquid, but the liquid depth is insufficient to float the floating roof, the process of filling to the point of refloating the IFR shall be

continuous and shall be performed as soon as practical. [40 C.F.R. § 63.1063(b)(2)]

- d. Each cover over an opening in an IFR, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall be closed at all times, except when the cover must be open for access. [40 C.F.R. § 63.1063(b)(3)]
- e. Each automatic bleeder vent (vacuum breaker vent) and rim space vent shall be closed at all times, except when required to be open to relieve excess pressure or vacuum, in accordance with the manufacturer's design. [40 C.F.R. § 63.1063(b)(4)]
- f. Each unslotted guidepole cap shall be closed at all times except when gauging the liquid level or taking liquid samples. [40 C.F.R. § 63.1063(b)(5)]

2. No later than May 8, 2027, CITGO shall equip, maintain, and operate each IFR control system to maintain the vapor concentration within the storage tank above the floating roof at or below 25% of the lower explosion limit (LEL) on a 5-minute rolling average basis without the use of purge gas. [40 C.F.R. § 63.11083(d)(2) and Table 1, Row 2(f)]

C. Emission Limits and Management Practices for the Loading Rack

1. CITGO shall equip the Loading Rack with a vapor collection system designed to collect the total organic compound (TOC) vapors displaced from cargo tanks during product loading.
2. CITGO shall operate the vapor collection system to prevent any TOC vapors collected at one loading lane from passing through another lane to the atmosphere.
3. Until May 8, 2027, CITGO shall limit the loading of gasoline into gasoline cargo tanks that are vapor tight using the procedures specified in 40 C.F.R. §§ 60.502(e) through (j).
4. No later than May 8, 2027, CITGO shall limit the loading of liquid product into gasoline cargo tanks using the procedures specified in 40 C.F.R. §§ 63.11092(g) and (h).

[40 C.F.R. Part 63, Subpart BBBB, Table 2]

D. Continuous Monitoring System (CMS)

1. CITGO shall install, calibrate, certify, operate, and maintain a CMS for the VCU. The CMS shall be continuously operated whenever gasoline vapors are displaced to the VCU. [40 C.F.R. § 63.11092(b)]

2. CITGO shall measure the presence of pilot flame in the VCU. The photo-eye shall send a positive parameter value to indicate that the pilot flame is on, or a negative parameter value to indicate that the pilot flame is off.
[40 C.F.R. § 63.11092(b)(1)(iii)(B)(1)]
3. CITGO shall develop and maintain a monitoring and inspection plan to meet the requirements of 40 C.F.R. § 63.11092(b)(1)(iii)(B)(2).
[40 C.F.R. § 63.11092(b)(1)(iii)(B)(2)]
4. CITGO shall not operate the VCU when presence of pilot flame is not indicated by the CMS. [40 C.F.R. § 63.11092(d)(1)]
5. Operation of the VCU when presence of pilot flame is not indicated by the CMS shall constitute a violation of the emission standard in Table 1.
[40 C.F.R. § 63.11092(d)(3)]

E. Storage Tank Inspections

1. CITGO shall perform inspections of the IFR systems according to the requirements of 40 C.F.R. § 63.1063(c)(1) as described below. [40 C.F.R. § 63.11092(f)(1)(i)]
 - a. Each time an IFR storage vessel is completely emptied and degassed, or every 10 years, whichever occurs first, CITGO shall perform an inspection by visually inspecting the floating roof deck, deck fittings, and rim seals from within the storage vessel. The inspection may be performed entirely from the top side of the floating roof, as long as there is visual access to all deck components as specified in 40 C.F.R. § 63.1063(a). [40 C.F.R. § 63.1063(c)(1)(i)(B) and § 63.1063(d)(1)]
 - b. Any of the following conditions constitutes a failure in the integrity of the internal floating roof system. [40 C.F.R. § 63.1063(d)]
 - (1) Stored liquid on the floating roof.
 - (2) Holes or tears in the primary or secondary seal (if one is present).
 - (3) Floating roof deck, deck fittings, or rim seals that are not functioning as designed.
 - (4) Failure to comply with the operational requirements of 40 C.F.R. § 63.1063(b).
 - (5) Gaps of more than 0.32 centimeters (1/8 inch) between any deck fitting gasket, seal, or wiper (required by 40 C.F.R. § 63.1063(a)) and any surface that it is intended to seal.
2. No later than May 8, 2027, CITGO shall conduct LEL monitoring according to the provisions of 40 C.F.R. § 63.425(j) as described below.
[40 C.F.R. § 63.11092(f)(1)(ii)]

- a. CITGO shall conduct LEL monitoring at least once every 12 months. If the measurement cannot be performed due to wind speeds exceeding those specified in § 63.425(j)(3)(iii), the measurement must be performed within 30 days of the previous attempt. [40 C.F.R. § 63.425(j)(1)]
- b. CITGO shall check the calibration of the LEL meter per manufacturer specifications immediately before and after the measurements as specified in §§ 63.425(j)(2)(i) and (ii). If tubing will be used for the measurements, the tubing must be attached during calibration so that the calibration gas travels through the entire measurement system. Any tubing used must be non-crimping and made of Teflon or other inert material. [40 C.F.R. §§ 63.425(j) and (j)(2)]
- c. CITGO shall conduct measurements as specified below.
 - (1) Measurements of the vapors within the IFR storage vessel shall be collected no more than 3 feet above the IFR.
 - (2) Measurements shall be taken for a minimum of 20 minutes, logging the measurements at least once every 15 seconds, or until one 5-minute average as determined according to § 63.425(j)(5)(ii) exceeds 25% of the LEL without the use of purge gas.
 - (3) Measurements shall be taken when the wind speed at the top of the tank is 5 mph or less to the extent practicable, but in no case shall measurements be taken when the sustained wind speed is greater than the annual average wind speed at the site or 15 mph, whichever is less.
 - (4) Measurements should be conducted when the IFR is floating with limited product movement (limited filling or emptying of the tank).
[40 C.F.R. § 63.425(j)(3)]
- d. CITGO shall use the methods in 40 C.F.R. §§ 425(j) to determine the actual vapor concentration within the storage vessel and calculate the 5-minute rolling average to demonstrate compliance with the emission limit in Subpart BBBBBB, Table 1, Row 2(c).
- e. A deviation of the LEL is considered an inspection failure under 40 C.F.R. § 113b(a)(2) and must be remedied as such (as described previously). Any repairs must be confirmed effective through re-monitoring of the LEL and meeting the level in Subpart BBBBBB, Table 1, Row 2(c) within the timeframe specified in 40 C.F.R. § 113b(a)(2), as described previously. [40 C.F.R. § 11092(f)(1)(ii)]

F. Equipment Leak Inspections

CITGO shall implement a leak detection and repair program for all equipment in gasoline service according to the requirements of paragraphs (1) or (2) below, as applicable. [40 C.F.R. § 63.11089(a)]

1. CITGO shall comply with the following until it has begun complying with the requirements of paragraph (2) below. The requirements of this paragraph (1) do not apply when demonstrating compliance with paragraph (2).
[40 C.F.R. §§ 63.11089(b) and (c)]
 - a. CITGO shall perform a monthly leak inspection of all equipment in gasoline service. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 C.F.R. § 63.11089(b)]
 - b. A logbook shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the logbook shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 C.F.R. § 63.11089(b)(1)]
 - c. Each detection of a liquid or vapor leak shall be recorded in the logbook. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than five calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. CITGO shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 C.F.R. §§ 63.11089(b)(2) and (3)]
2. No later than May 8, 2027, CITGO shall comply with the requirements of 40 C.F.R. § 60.502a(j) except as provided in 40 C.F.R. §§ 63.11089(c)(1) through (4) as described below. [40 C.F.R. § 63.11089(c)]

For this section, “equipment in gasoline service” also includes all equipment in the vapor collection system, the vapor processing system, and each loading rack and loading arm handling gasoline.

- a. CITGO shall conduct leak detection monitoring of all pumps, valves, and connectors in gasoline service using either of the methods specified below:
 - (1) Use OGI to annually monitor all pumps, valves, and connectors in gasoline service as specified in 40 C.F.R. § 60.503a(e)(2)
or

(2) Use 40 C.F.R. Part 60, Appendix A, Method 21 as specified in 40 C.F.R. §§ 60.503a(e)(1) and 60.502(j)(1(ii)(A) through (C) except that monitoring shall be conducted annually instead of quarterly.

[40 C.F.R. § 60.502a(j)(1)]

b. During normal duties, CITGO shall record leaks identified by audio, visual, or olfactory methods. [40 C.F.R. § 60.502a(j)(2)]

c. CITGO shall conduct instrument monitoring pursuant to paragraph (1) above each pressure relief device annually and within five calendar days after each pressure release. [40 C.F.R. § 60.502a(j)(4)(i)]

d. For open-ended valves or lines, CITGO shall comply with the following. [40 C.F.R. § 60.502a(j)(6)]

(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except for:

(i) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset; or

(ii) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system.

[40 C.F.R. §§ 60.482-6a(a), (d), and (e)]

(2) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 C.F.R. § 60.482-6a(b)]

(3) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (i) above. [40 C.F.R. § 60.482-6a(c)]

e. A leak is detected if any of the following occurs:

- Emissions are observed when using OGI;
- An instrument reading of 10,000 ppm or greater when using Method 21; or
- Evidence of a potential leak is found at any time by audio, visual, olfactory, or any other detection method for any equipment in gasoline service.

When a leak is detected from any equipment in gasoline service, CITGO shall comply with the following requirements: [40 C.F.R. § 60.502a(7)]

- (1) CITGO shall attach a weatherproof and readily visible identification, marked with the equipment identification number, to the leaking equipment. The identification on equipment may be removed after it has been repaired.
- (2) An initial attempt at repair shall be made as soon as practicable, but no later than five calendar days after the leak is detected. An initial attempt at repair is not required if the leak is detected using OGI and the equipment identified as leaking would require elevating the repair personnel more than two meters above a support surface.
- (3) Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak, except as described below. For leaks identified using either OGI or Method 21, the leak is considered repaired when instrument re-monitoring of the equipment does not detect a leak. For leaks identified using audio, visual, or olfactory methods, the leak is considered repaired when the leak can no longer be identified using audio, visual, or olfactory methods. [40 C.F.R. §§ 60.502a(j)(7) and (8)]
 - (i) Delay of repair of equipment will be allowed for equipment that is isolated from the affected facility and that does not remain in gasoline service.
 - (ii) Delay of repair for valves and connectors will be allowed if:
 1. CITGO demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay or repair; and
 2. When repair procedures are affected, the purged material is collected and destroyed or recovered in a control device as specified in 40 C.F.R. § 60.502a(j)(8)(ii)(B).
 - (iii) Delay of repair will be allowed for a valve, but not later than three months after the leak was detected, if valve assembly replacement is necessary, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted.
 - (iv) Delay of repair for pumps will be allowed if:
 1. Repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and
 2. Repair is completed as soon as practicable, but not later than six months after the leak was detected.
- (4) If a leak cannot be repaired within 15 days, CITGO shall notify the Department of the leak, the reason for the delay, and the expected date of

the repair. CITGO shall promptly notify the Department of the date that the leak is successfully repaired. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

G. General Recordkeeping Requirements

Any records required to be maintained by 40 C.F.R. Part 63, Subpart BBBBBB that are submitted electronically via the EPA's Compliance Emissions Reporting Interface (CEDRI) may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to the Department or EPA as part of an on-site compliance evaluation. [40 C.F.R. § 63.11094(o)]

H. Recordkeeping for Storage Tanks

CITGO shall keep the following records of each LEL monitoring event:

1. Date and time of the LEL monitoring and the storage vessel being monitored;
2. A description of the monitoring event (e.g., monitoring conducted concurrent with visual inspection required under § 63.1063(d)(2) or re-monitoring after repair attempt);
3. Wind speed at the top of the storage vessel on the date of LEL monitoring;
4. The LEL meter manufacturer and model number used, as well as an indication of whether tubing was used during the LEL monitoring, and if so, the type and length of tubing used;
5. Calibration checks conducted before and after making the measurements, including both the span and check and instrumental offset. This includes the hydrocarbon used as the calibration gas, the Certificate of Analysis for the calibration gas(es), the results of the calibration check, and any corrective action for calibration checks that do not meet the required response;
6. Location of the measurements and location of the floating roof;
7. Each measurement (taken at least once every 15 seconds); The records should indicate whether the recorded values were automatically corrected using the meter's programming. If the values were not automatically corrected, record both the raw (as the calibration gas) and corrected measurements, as well as the correction factor used.
8. Each 5-minute rolling average reading; and
9. If the vapor concentration of the storage vessel was above 25 percent of the LEL on a 5-minute rolling average basis, a description of whether the floating roof was repaired, replaced, or taken out of gasoline service.

[40 C.F.R. §63.11094(a)(2)]

I. Recordkeeping for the Loading Rack

CITGO shall record and maintain the following records for the Loading Rack in either hardcopy or electronic format:

1. The test results for each gasoline cargo tank loading at the facility as specified in 40 C.F.R. §§ 63.11094(b).
2. Description of the types, identification numbers, and locations of all equipment in gasoline service. [40 C.F.R. § 63.11094(c)]
3. For equipment leak inspections conducted pursuant to § 63.11089(b) (i.e., inspections conducted using sight, sound, and smell), CITGO shall record in the logbook the following information for each leak that is detected:
 - a. The equipment type and identification number.
 - b. The nature of the leak (i.e., vapor or liquid) and the method of detection (i.e., sight, sound, or smell).
 - c. The date the leak was detected and the date of each attempt to repair the leak.
 - d. Repair methods applied in each attempt to repair the leak.
 - e. “Repair delayed” and the reason for the delay if the leak is not repaired within fifteen (15) calendar days after discovery of the leak.
 - f. The expected date of successful repair of the leak if the leak is not repaired within fifteen (15) days.
 - g. The date of successful repair of the leak.

[40 C.F.R. § 63.11094(d)]
4. No later than May 8, 2027, CITGO shall maintain records of each leak inspection and leak identified under 40 C.F.R. § 63.11089(c) (i.e., OGI or Method 21 inspections) as specified in 40 C.F.R. §§ 63.11094(e)(1) through (5). [40 C.F.R. § 63.11094(e)]
5. Up-to-date, readily accessible records of the CMS data. The records shall indicate the time intervals during which loadings of gasoline cargo tanks have occurred or, alternatively, shall record the operating parameter data only during such loadings. The date and time of day shall also be indicated at reasonable intervals on this record. [40 C.F.R. § 63.11094(f)(1)]
6. Up-to-date, readily accessible copy of the monitoring and inspection plan required under 40 C.F.R. § 63.11092(b)(1)(iii)(B)(2). [40 C.F.R. § 63.11094(f)(3)]
7. Up-to-date, readily accessible records of all system malfunctions, as specified in 40 C.F.R. § 63.11092(b)(1)(iii)(B)(2)(v). [40 C.F.R. § 63.11094(f)(4)]
8. Records of the thermal oxidation system (VCU) as specified in 40 C.F.R. § 63.11094(g)(2).
9. Each instance in which liquid product was loaded into a gasoline cargo tank for which vapor tightness documentation required under 40 C.F.R. § 502(e)(1) was not provided or available in the terminal’s records. These records shall include, at a minimum:
 - a. Cargo tank owner and address;
 - b. Cargo tank identification number;

- c. Date and time liquid product was loaded into a gasoline cargo tank without proper documentation; and
- d. Date proper documentation was received or statement that proper documentation was never received.

[40 C.F.R. § 63.11094(h)]

10. Each instance when liquid product was loaded into gasoline cargo tanks not using submerged filling, or, if applicable, not equipped with vapor collection or balancing equipment that is compatible with the terminal's vapor collection system. These records shall include at a minimum:

- a. Date and time of liquid product loading into gasoline cargo tank not using submerged filling, improperly equipped, or improperly connected;
- b. Type of deviation (e.g., not submerged filling, incompatible equipment, not properly connected); and
- c. Cargo tank identification number.

[40 C.F.R. § 63.11094(i)]

11. The following records for each deviation of an emissions limitation (including operating limit), work practice standard, or operation and maintenance requirement:

- a. Date, start time, and duration of each deviation;
- b. List of the affected sources or equipment for each deviation, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate emissions; and
- c. Actions taken to minimize emissions in accordance with § 63.11085(a) (i.e., general duty to minimize emissions).

[40 C.F.R. § 63.11094(k)]

12. The average gasoline throughput (in gallons per day). [40 C.F.R. § 63.11094(l)]

J. Reports

1. Prior to May 8, 2027, CITGO shall submit to the Department and EPA semiannual compliance reports with the following information, as applicable.

[40 C.F.R. § 63.11095(c)]

 - a. The information specified in 40 C.F.R. § 63.1066;
 - b. For loading racks, each loading of gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility; and
 - c. For equipment leak inspections, the number of equipment leaks not repaired within 15 days after detection.
2. Prior to May 8, 2027, CITGO shall submit to the Department and EPA excess emissions reports at the time the semiannual compliance report is submitted. The sections 40 C.F.R. §§ 63.11095(c)(2)(i) through (v) identify what constitutes an excess emissions event and the information to be included in the excess emissions report. [40 C.F.R. § 63.11095(c)(2)]

3. On and after May 8, 2027, CITGO shall submit to the Department and EPA semiannual compliance reports that contain the information in 40 C.F.R. §§ 63.11095(d)(1) and (4) through (9), as applicable. [40 C.F.R. § 11095(d)]
4. CITGO shall submit semiannual compliance reports to the Department and EPA with the information outlined in paragraphs (b) through (d) above according to the requirements of 40 C.F.R. § 63.13. Beginning May 8, 2027, or once the report template for Subpart BBBB has been available on the CEDRI website for one year, whichever date is later, CITGO shall submit all subsequent semiannual compliance reports using the appropriate electronic report template on the CEDRI website and following the procedure specified in 40 C.F.R. § 63.9(k), except any medium submitted through mail to EPA must be sent to the attention of the Gasoline Distribution Sector Lead. The date report templates become available will be listed on the CEDRI website. [40 C.F.R. § 11095(e)]

(17) **06-096 C.M.R. ch. 171**

Following are requirements of 06-096 C.M.R. ch. 171 not addressed elsewhere in this Order. **Enforceable by State-only**

A. Inspections Using Optical Gas Imaging

CITGO shall perform inspections in accordance with the following:

1. At least once per calendar quarter CITGO shall conduct an inspection survey of each internal floating roof tank, each fixed roof tank, and facility fugitive emissions component using optical gas imaging equipment.
[06-096 C.M.R. ch. 171, § 5(A)(1)]
2. The optical gas imaging equipment used must meet the following specifications as verified by the manufacturer:
 - a. Capable of imaging gases in the spectral range for benzene; and
 - b. Capable of imaging a gas that is half methane and half propane at a concentration of 10,000 ppm at a flow rate of \leq 60 grams per hour from a quarter inch diameter orifice.
[06-096 C.M.R. ch. 171, § 5(A)(2)]
3. If visible emissions are observed in a fugitive emissions component using optical gas imaging equipment, within two calendar days CITGO shall determine whether a leak, as defined by 06-096 C.M.R. ch. 171, is present by using photo ionization

detection (PID) technology or flame ionization detection (FID) technology. Alternatively, CITGO may elect to presume that a leak is present without further confirmation. If a leak is determined or presumed to be present, CITGO shall initiate corrective action and repair the leak within 15 calendar days.

- a. If the presence of a leak cannot be confirmed due to safety concerns or physical constraints, CITGO shall presume the leak to be confirmed and initiate corrective action and repair the leak within 15 calendar days.
- b. If a leak cannot be repaired within 15 days, CITGO shall notify the Department of the leak, the reason for the delay, and the expected date of the repair. CITGO shall promptly notify the Department of the date that the leak is successfully repaired. A fugitive emissions component is considered repaired when the optical gas imaging equipment shows no indication of visible emissions or there is no longer indication of a leak as that term is defined in this regulation under normal use conditions.

[06-096 C.M.R. ch. 171, § 5(A)(5)]

4. For all quarterly inspections conducted using optical gas imaging equipment CITGO shall keep the following records:
 - a. The date of the inspection;
 - b. Identification and description of the equipment and areas inspected;
 - c. A description of any leaks detected;
 - d. An electronic recording of the optical gas imaging equipment images; and
 - e. A description of any resulting corrective actions or repairs and the dates they were made.

[06-096 C.M.R. ch. 171, § 7(B)]

B. Fenceline Monitoring

CITGO shall conduct sampling along the facility property boundary and analyze the samples in accordance with 40 C.F.R. Part 63, Appendix A, Methods 325A and 325B as specified below.

1. The monitoring program shall be designed and operated by a qualified, independent, third-party entity. [06-096 C.M.R. ch. 171, § 6(B)(1)]
2. The target analytes shall be benzene, ethylbenzene, toluene, and xylenes.

[06-096 C.M.R. ch. 171, § 6(B)(2)]

3. A maximum 14-day sampling period shall be used except under extenuating circumstances as described below. Upon approval by the Department, CITGO may use a shorter sampling period.

When extenuating circumstances do not permit safe deployment or retrieval of passive samplers (e.g., extreme weather, power failure), sampler placement or retrieval earlier or later than the prescribed schedule is allowed but must occur as soon as safe access to sampling sites is possible.

[06-096 C.M.R. ch. 171, § 6(B)(3)]

4. CITGO shall conduct fenceline monitoring through use of a qualified, independent, third-party entity. Monitoring must be conducted in accordance with the site-specific fenceline monitoring plan as approved by the Department. [06-096 C.M.R. ch. 171, § 6(B)(5)]

5. CITGO shall keep the following records:

- a. Coordinates of all passive monitors and the meteorological station used. Coordinates shall be determined using a method with an accuracy of three meters or less.
- b. Average ambient temperature and barometric pressure measurements for the sampling period.
- c. Individual sample results.
- d. Method detection limit for each sample.

[06-096 C.M.R. ch. 171, § 7(C)]

6. CITGO shall submit a report to the Department for each calendar quarter with the following information. Each quarterly report must be electronically submitted no later than 45 days after the end of the reporting period.

- a. Facility name and address.
- b. Year and reporting quarter (i.e., Quarter 1, Quarter 2, Quarter 3, or Quarter 4).
- c. For each passive monitor:
 - (1) The latitude and longitude location coordinates;
 - (2) The sampler name; and
 - (3) Identification of the type of sampler (e.g., regular monitor, duplicate, field blank, etc.)
- d. The beginning and ending dates for each sampling period.
- e. Individual sample results in units of micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) for each monitor for each sampling period that ends during the reporting period. Results below the method detection limit shall be flagged as such and reported at the method detection limit.

f. Meteorological data collected during each sampling period, including wind speed and direction.
[06-096 C.M.R. ch. 171, § 8]

(18) Fixed Roof Tanks

A. CITGO shall record data and maintain records for the following periodic monitoring values for the fixed roof tanks:

1. For each tank, records of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period; [06-096 C.M.R. ch. 140, BPT]
2. Records of product stored and throughput for each tank on a monthly basis; [06-096 C.M.R. ch. 137]
3. Inspection log documenting the monthly inspections of the fixed roof tanks including the date and results of each inspection and documentation of corrective action taken. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

B. CITGO shall notify the Department at least seven days in advance of any planned degassing event, and as soon as possible for any unplanned degassing event for the fixed roof storage tanks. CITGO shall provide the Department with the identification of the tank to be degassed and the date(s) when degassing will occur. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

(19) Marine Vessel Loading

A. CITGO shall not exceed a petroleum product throughput of 10,000,000 gallons of gasoline and 45,000,000 of distillate oil (based on a 12-month rolling total) through the Marine Vessel Loading Dock. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

B. CITGO shall conduct routine inspections of the Marine Vessel Loading Dock piping and transfer lines at a minimum of once every month. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

C. The Marine Vessel Loading Dock shall utilize a vapor combustion system that captures and controls displaced VOC vapors whenever gasoline, ethanol, or a gasoline ethanol blend is being transferred to a marine vessel. This vapor combustion system shall be designed to achieve a VOC destruction efficiency of at least 95%.
[06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

D. 40 C.F.R. Part 63, Subpart Y

1. CITGO shall meet the submerged fill standards of 46 C.F.R. § 153.282. [40 C.F.R. § 63.560(a)(4)]
2. CITGO shall calculate annual emissions of HAP from the marine loading of gasoline. Emission estimates and emission factors shall be based on test date, or if test data is not available, shall be based on measurement or estimating techniques approved by the Department. [40 C.F.R. § 63.565(l)]

E. Periodic Monitoring

CITGO shall record data and maintain records for the following periodic monitoring values for the Marine Vessel Loading Dock when in operation:

1. Hours of operation on a monthly and calendar year basis; [06-096 C.M.R ch. 137]
2. Monthly throughput specifying quantity and types of product transferred; [06-096 C.M.R. ch. 137 and 40 C.F.R. § 63.567(j)(4)]
3. Records of emission estimates; and [06-096 C.M.R. ch. 137 and 40 C.F.R. § 63.567(j)(4)]
4. Inspection log documenting routine monthly inspections of piping and transfer lines to include any leaks and the schedule for repair. [06-096 C.M.R. ch. 140, BPT]

Enforceable by State-only

(20) Facility-Wide Limits

A. CITGO shall not exceed the following facility-wide emission limits (each on a 12-month rolling total basis):

Pollutant	Emission Limit (tpy)
VOC	104.4
Total HAP	5.0

[06-096 C.M.R. ch. 140, BPT]

B. Compliance with the facility-wide annual NO_x and CO emission limits shall be demonstrated by compliance with the Loading Rack and Marine Vessel Loading throughput limits and performance testing of the VCU upon request by the Department. [40 C.F.R. § 70.6(c)(1)]

C. Compliance with the facility-wide annual VOC emission limit shall be demonstrated by calculating actual emissions at least once annually as required by *Emission Statements*, 06-096 C.M.R. ch. 137. [40 C.F.R. § 70.6(c)(1)]

- D. Compliance with the facility-wide annual HAP emission limit shall be demonstrated by calculating actual emissions at least once every three years as required by *Emission Statements*, 06 096 C.M.R. ch. 137. [40 C.F.R. § 70.6(c)(1)]
- E. CITGO shall maintain records necessary to calculate annual VOC and HAP emissions for any consecutive 12-month period and shall provide a demonstration of compliance with the facility-wide VOC and HAP emission limits for any consecutive 12-month period upon request by the Department. [40 C.F.R. § 70.6(c)(1)]
- F. Actual emissions shall be calculated as follows with all emissions summed to provide an annual total: [40 C.F.R. § 70.6(c)(1)]

1. Petroleum Storage Tanks

VOC and HAP emissions from the petroleum storage tanks shall be calculated in accordance with the methodology contained in the most current version of EPA's Compilation of Air Emission Factors (AP-42), Fifth Edition, Volume 1, Chapter 7, *Liquid Storage Tanks*.

2. Tank Maintenance

Emissions from tank maintenance (both planned and unplanned), including roof landings, tank degassing, and tank cleaning, shall be included when calculating the facility's annual facility-wide VOC and HAP emissions. Emissions from these operations shall be calculated in accordance with the methodology contained in the most current version of AP-42, Fifth Edition, Volume 1, Chapter 7 and taking into account the control efficiency of any control equipment approved by the Department for use.

3. Facility Piping

CITGO shall keep an updated inventory of system components (e.g., valves, pump seals, connectors, flanges, etc.) and calculate fugitive emissions using emission factors obtained from EPA's *Protocol for Equipment Leak Emission Estimates*, EPA-453/R-95-017, dated November 1995.²

4. Loading Rack and Marine Vessel Loading

- a. Fugitive VOC emissions from the Loading Rack shall be assumed to be 1.3% of the vapors displaced during loading.
- b. Emissions of VOC from the collected gases sent to the VCU shall be based on data from the most recent performance test. Emissions of HAP shall be

² <https://www3.epa.gov/ttnchie1/efdocs/equiplks.pdf>

determined based on the mass of VOC emissions from the most recent performance test and speciation data from AP-42.

G. CITGO shall keep the following records in order to calculate emissions as described above for compliance demonstration with the facility-wide annual VOC and HAP emission limits: [40 C.F.R. § 70.6(c)(1)]

1. Monthly throughput for each petroleum storage tank;
2. Monthly throughput of each product at the Loading Rack;
3. Monthly throughput of each product for Marine Vessel Loading;
4. Equipment and product information necessary to calculate emissions from the petroleum storage tanks in accordance with AP-42, Chapter 7;
5. Process and product information necessary to calculate emissions from tank maintenance operations in accordance with AP-42, Chapter 7; and
6. Equipment and product information necessary to calculate emissions from facility piping in accordance with EPA's *Protocol for Equipment Leak Emission Estimates*.

(21) Fugitive Emissions

A. CITGO shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

B. CITGO shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

[06-096 C.M.R. ch. 101, § 4(C)]

(22) Parameter Monitor General Requirements

[06-096 C.M.R. ch. 140]

- A. Parameter monitors required by this license shall be installed, operated, maintained, and calibrated in accordance with manufacturer recommendations or as otherwise required by the Department.
- B. Parameter monitors required by this license shall continuously monitor data at all times the associated emissions unit is in operation. "Continuously" with respect to the operation of parameter monitors required by this license means providing equally spaced data points with at least one valid data point in each successive 15-minute period. A minimum of three valid 15-minute periods constitutes a valid hour.

C. Each parameter monitor must record accurate and reliable data. If any parameter monitor is recording accurate and reliable data less than 98% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action. The Department may include in that enforcement action any period of time that the parameter monitor was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the Department's satisfaction that the failure of the system to record such data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.

Enforceable by State-only

(23) Semiannual Reporting [06-096 C.M.R. ch. 140]

Note: This semiannual report is separate from, and in addition to, any semiannual report required by specific NSPS or NESHAP regulations.

- A. The licensee shall submit to the Bureau of Air Quality semiannual reports which are due on **January 31st** and **July 31st** of each year. The facility's designated responsible official must sign this report.
- B. Each semiannual report shall include a summary of the periodic monitoring required by this license.
- C. 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.

(24) Annual Emission Statements

- A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, CITGO shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.
- B. CITGO shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:
 1. The capacity of each petroleum storage tank;
 2. Monthly throughput of each petroleum storage tank;
 3. Monthly throughput of each product at the Loading Rack;
 4. Monthly throughput of each product for Marine Vessel Loading;
 5. Monthly propane usage for the VCU;
 6. Calculations of the facility-wide VOC and HAP emissions on a calendar year total basis; and

7. Hours each emission unit was active or operating on a monthly basis.
[06-096 C.M.R. ch. 137]

C. Every third year, or as requested by the Department, CITGO shall report to the Department emissions of hazardous air pollutants as required pursuant to 06-096 C.M.R. ch. 137, § (3)(C). The next report is due no later than May 15, 2027, for emissions occurring in calendar year 2026. CITGO shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3)]

(25) General Applicable State Regulations

The licensee is subject to the State regulations listed below.

Origin and Authority	Requirement Summary	Enforceability
06-096 C.M.R. ch. 102	Open Burning	-
06-096 C.M.R. ch. 109	Emergency Episode Regulations	-
06-096 C.M.R. ch. 110	Ambient Air Quality Standards	-
06-096 C.M.R. ch. 116	Prohibited Dispersion Techniques	-
38 M.R.S. § 585-B, §§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 C.F.R. Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. Examples of such units include refrigerators and any size air conditioners that contain CFCs. [40 C.F.R. Part 82, Subpart F]

(27) Asbestos Abatement

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

(28) Expiration of a Part 70 license

- A. CITGO shall submit a complete Part 70 renewal application at least six but no more than 18 months prior to the expiration of this air license.
- B. Pursuant to Title 5 M.R.S. §10002, and 06-096 C.M.R. ch. 140, the Part 70 license shall not expire and all terms and conditions shall remain in effect until the Department takes final action on the renewal application of the Part 70 license. An existing source submitting a complete renewal application under 06-096 C.M.R. ch. 140 prior to the

expiration of the Part 70 license will not be in violation of operating without a Part 70 license. **Enforceable by State-only**

(29) New Source Review

CITGO is subject to all previous New Source Review (NSR) requirements summarized in this Part 70 air emission license, and the NSR requirements remain in effect even if this 06-096 C.M.R. ch. 140 Air Emissions License, A-460-70-H-R, expires.

DONE AND DATED IN AUGUSTA, MAINE THIS 5th DAY OF NOVEMBER, 2025.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____ for _____
MELANIE LOYZIM, COMMISSIONER

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

[Note: If a complete renewal application, as determined by the Department, is submitted at least six but no more than 18 months prior to expiration of the facility's Part 70 license, then pursuant to Title 5 M.R.S. §10002, all terms and conditions of the Part 70 license shall remain in effect until the Department takes final action on the Part 70 license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 11/15/2019
Date of application acceptance: 11/15/2019

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