

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

DEPARTMENT ORDER

Gulf Oil Limited Partnership Cumberland County South Portland, Maine A-390-71-P-R/M Departmental Findings of Fact and Order Air Emission License Renewal with Amendment

FINDINGS OF FACT

After review of the air emission license renewal application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

Gulf Oil Limited Partnership (Gulf) has applied to renew their Air Emission License for the operation of emission sources associated with their petroleum storage and distribution facility.

Gulf has requested a minor revision to their license in order to:

- 1. Change to compliance method for the vapor recovery unit (VRU) from annual performance testing to use of a continuous emissions monitoring system (CEMS);
- 2. Remove residual oil from the list of products stored; and
- 3. Address marine vessel loading.

The equipment addressed in this license is located at 175 Front Street, South Portland, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Petroleum Storage Internal Floating Roof Tanks

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	Capacity		Date
Equipment	(gallons)	Products Stored	Installed
D1	4,003,566		1950
D3	3,828,552	gasoline, ethanol,	1950
D7	3,247,062	gasoline/ethanol blends,	1953
D8	5,985,840	distillate oil, jet fuel, kerosene	1954
D9	767,466		1959

Petroleum Storage Fixed Roof Tanks

	Capacity		Date
Equipment	(gallons)	Products Stored	Installed
D2	3,995,040		1950
D4	2,205,042	distillate oil ist fuel transcome	1950
D5	3,983,490	distillate off, jet fuel, kerosene	1950
D6	3,992,268		1950

Gulf may also operate tanks that have capacities less than 10,000 gallons which store products with vapor pressures less than 80 mm Hg at 21 °C. These tanks are considered insignificant activities pursuant to *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115, Appendix B, § B.7 and are thereby not required to be included in the facility's air emission license.

Process Equipment

Fauinment	When Loading	Maximum Loading Rate	Date of Manufacture and Installation	Pollution Control Equipment	Stack #
Loading	gasoline/ethanol blends	3,600 gal/min	1995	Vapor Recovery Unit (VRU)	VRU Stack #1
Rack	distillate, jet fuel, or kerosene	4,000 gal/min	1950	None	Fugitive

Gulf also operates two package boilers installed in 2005, each with a design capacity less than 1.0 MMBtu/hr. These boilers are considered insignificant activities pursuant to 06-096 C.M.R. ch. 115, Appendix B, § B.2 and are thereby not required to be included in the facility's air emission license. These boilers were converted to firing only natural gas in March 2015 and are therefore not subject to *National Emission Standards for Hazardous*

Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources, 40 C.F.R. Part 63, Subpart JJJJJJ, pursuant to § 63.11195(e).

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Gulf may operate small stationary engines smaller than 0.5 MMBtu/hr. These engines are considered insignificant activities and are not required to be included in this license. However, they are still subject to applicable State and Federal regulations. More information regarding requirements for small stationary engines is available on the Department's website at the link below.

http://www.maine.gov/dep/air/publications/docs/SmallRICEGuidance.pdf

Additionally, Gulf may operate <u>portable</u> engines used for maintenance or emergency-only purposes. These engines are considered insignificant activities and are not required to be included in this license. However, they may still be subject to applicable State and Federal regulations.

C. <u>Definitions</u>

<u>Additive.</u> A general term for small quantity products added to standard fuel products. Examples include, for gasoline, proprietary detergents to improve internal combustion performance, and for distillate fuel, lubricity products to compensate for low sulfur requirements. Additives are typically in small storage tanks/containers and added at the truck loading rack.

<u>Continuously</u>. With respect to the operation of the monitors and CEMS required by this license, continuously 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. If the VOC CEMS is recording accurate and reliable data less than 95% 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.

<u>Degassing</u> or <u>Degassing Event</u> 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;

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- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- · Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

<u>Equipment in gasoline service</u> 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.

Note: Ethanol is required to be "denatured" to create an odor and taste to deter human consumption. Therefore, "ethanol" stored at gasoline terminals typically refers to a mix of 95% ethanol/5% gasoline.

<u>Gasoline</u> 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.

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

<u>Kerosene</u> means a petroleum product that complies with the specifications in ASTM D3699.

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

<u>Portable or Non-Road Engine</u> 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. <u>A location is any single site</u> 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 <u>not</u> 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.

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<u>Records</u> or <u>Logs</u> mean either hardcopy or electronic records.

<u>Residual Oil</u> means fuel oil that complies with the specifications for fuel oil numbers 4, 5, and 6 as defined by the ASTM in ASTM D396.

D. Application Classification

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

The application for Gulf does not include the licensing of increased emissions or the installation of new or modified equipment. Gulf has requested a minor revision to change the compliance method for the VRU. This change will not result in any increase in permitted or actual emissions. Therefore, the license is considered to be a renewal of currently licensed emission units with a minor revision and has been processed through 06-096 C.M.R. ch. 115.

E. Facility Classification

With the facility-wide emission limits on VOC and HAP and the annual throughput limits on the products stored, the facility is licensed as follows:

- As a synthetic minor source of air emissions for VOC, because Gulf is subject to license restrictions that keep facility emissions below major source thresholds for criteria pollutants; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

Emissions of VOC and HAP are licensed above 80% of the major source threshold. Therefore, this facility is classified as an "80% Synthetic Minor" for the purpose of determining the minimum required compliance inspection frequency in accordance with Maine's Compliance Monitoring Strategy.

F. Potentially Applicable Regulations

Following is a list of regulations that may potentially be applicable to Gulf including a summary of why each does or does not apply. This list is not intended to be all-inclusive, and exclusion from this list is not intended as a permit shield.

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Citation	Title	Applicable	Reason
06-096 C.M.R.	Visible Emissions Regulation	Y	Requirements for process equipment
ch. 101			and fugitive emissions.
06-096 C.M.R.	Low Sulfur Fuel	Y	Gulf imports, distributes, and offers
ch. 106			for sale distillate oil.
06-096 C.M.R.	Petroleum Liquid Storage	Y	IFR tanks may store products with a
ch. 111	Vapor Control		vapor pressure greater than 10.5 kPa.
06-096 C.M.R.	Bulk Terminal Petroleum	Y	Gulf is a bulk gasoline terminal with a
ch. 112	Liquid Transfer Requirements		daily throughput of gasoline of more
			than 20,000 gallons.
06-096 C.M.R.	Major and Minor Source Air	Y	Gulf has the potential to emit more
ch. 115	Emission License Regulation		than 10 lb/hr or 100 lb/day of a
	~ ~ ~ "		regulated pollutant.
06-096 C.M.R.	Source Surveillance –	Y	Applicable to the VOC CEMS.
ch. 117	Emissions Monitoring		
06-096 C.M.R.	Gasoline Dispensing Facilities	N	Gulf does not meet the definition of
ch. 118	Vapor Control	37	"gasoline dispensing facility."
06-096 C.M.R.	Gasoline Tank Truck Tightness	Y	Gulf must ensure it does not load non-
ch. 120	Self-Certification		compliant trucks.
06-096 C.M.K.	Petroleum Liquids Transfer	IN	Gult does not meet the definition of
ch. 133	Vapor Recovery at Bulk		"bulk gasoline plant. Similar
	Gasonne Fiants		terminals are addressed in
			06-096 C M R ch 112
06-096 C M R	Reasonably Available Control	Y	Gulf has non-exempt potential
ch 134	Technology for Facilities that	*	emissions of VOC in excess of
	Emit Volatile Organic		40 tov.
	Compounds		
06-096 C.M.R.	Emission Statements	Y	Gulf has licensed emissions of VOC
ch. 137			in excess of 25 tpy.
06-096 C.M.R.	Part 70 Air Emission License	N	Gulf has license restrictions that limit
ch. 140	Regulation		emissions of VOC and HAP to less
	_		than major source thresholds.
06-096 C.M.R.	Degassing of Petroleum	Y	Gulf performs degassing of tanks
ch. 170	Storage Tanks, Marine		which stored gasoline or ethanol.
	Vessels, and Transport Vessels		
40 C.F.R. Part 60,	Standards of Performance for	Ν	All storage vessels were constructed
Subpart K	Storage Vessels for Petroleum		prior to 1973 and none have been
	Liquids for Which		reconstructed or modified.
	Construction, Reconstruction,		
	or Modification Commenced		
	after June 11, 19/3, and Prior		
	to May 19, 1978		

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Departmental Findings of Fact and Order Air Emission License Renewal with Amendment

Citation	Title	Applicable	Reason
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	N	All storage vessels were constructed prior to 1978 and none have been reconstructed or modified.
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	Ν	All storage vessels were constructed prior to 1984 and none have been reconstructed or modified.
40 C.F.R. Part 60, Subpart XX	Standards of Performance for Bulk Gasoline Terminals	Y	The gasoline loading rack was constructed after December 17, 1980.
40 C.F.R. Part 63, Subpart R	National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)	N	Regulation only applies to major sources of HAP. Gulf is not a major source of HAP.
40 C.F.R. Part 63, Subpart Y	National Emission Standards for Marine Tank Vessel Loading Operations	N	This regulation does not apply to the loading of distillate oil.
40 C.F.R. Part 63, Subpart CC	National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries	N	Gulf is not a refinery.
40 C.F.R. Part 63, Subpart BBBBBB	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities	Y	Gulf is an existing gasoline terminal.
40 C.F.R. Part 63, Subpart CCCCCC	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities	N	Gasoline dispensing facilities load gasoline directly into the fuel tanks of vehicles. Gulf is not a gasoline dispensing facility.
40 C.F.R. Part 63, Subpart JJJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources	N	Gulf's boilers are exempt because they fire natural gas.

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II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

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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. Facility Description

The operations of Gulf's South Portland bulk petroleum distribution terminal consist of the receipt, storage, and distribution of gasoline, ethanol, gasoline/ethanol blends, distillate oil, jet fuel, and kerosene, with their corresponding additives. Gulf was previously licensed to store and distribute residual oil. However, this product is no longer stored at the facility, and Gulf has requested its removal from the license.

Petroleum products handled at this facility are received by either marine vessel or by truck and transferred via product piping to the terminal's tank farm. Final distribution of product is conducted primarily at the truck loading rack. The facility's loading rack configuration includes five lanes with a total of six gasoline loading arms, seven distillate oil bottom loading arms, and one distillate top loading arm. Gulf has requested the ability to load marine vessels with distillate oil, jet fuel, or kerosene under a very limited set of circumstances as is described below in the section on Product Distribution.

Several regulated air pollutants are associated with operations at the facility, primarily volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) associated with petroleum products. Emission units and processes addressed in this license include:

- 1. Product Distribution, Loading Rack, and VRU;
- 2. Above Ground Bulk Storage Tanks; and
- 3. Equipment/Piping Components.

C. Low Sulfur Fuel

Low Sulfur Fuel, 06-096 C.M.R. ch. 106, establishes the maximum sulfur content of fossil fuels allowed to be imported, distributed, or offered for sale within the state. Gulf shall not import, distribute, or offer for sale within the state of Maine any distillate oil to be used as a fuel unless the distillate oil has a sulfur content of 0.0015% by weight or less. [06-096 C.M.R. ch. 106, § 3(A)(2)] Compliance shall be demonstrated by maintaining records of the sulfur content of shipments received.

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D. VOC RACT

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, Gulf 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 milligrams per liter (mg/l) 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.

E. <u>Pending State Regulations</u>

In 2021, the Maine State Legislature passed and the governor signed into law LD 163, which established several new requirements for petroleum storage facilities. The Department initiated rulemaking to implement the requirements of LD 163 in late 2021. This new rule, *Control of Petroleum Storage Facilities*, 06-096 C.M.R. ch. 171, is expected to be finalized in 2023. This license includes a requirement for Gulf to submit to the Department a request for a minor revision to this license within six months of the effective date of the rule to address applicable requirements. Although Gulf will become subject to the applicable requirements of 06-096 C.M.R. ch. 171 on the effective date of the rule, the license amendment will incorporate those new applicable requirements into the facility's license.

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

Gulf 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 which 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 affected sources under 40 C.F.R. Part 63, Subpart BBBBBB include gasoline storage tanks, gasoline loading racks, and gasoline cargo tanks (trucks). [40 C.F.R. § 63.11082(a)] Accordingly, this regulation contains requirements applicable to both the Loading Rack and the internal floating roof (IFR) petroleum storage tanks storing gasoline, including gasoline blended with ethanol. This regulation is not applicable to tanks which store ethanol which has not been blended with gasoline since ethanol alone does not meet the definition of *gasoline* in this subpart.

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

1. General Requirements

Gulf 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. [40 C.F.R. § 63.11085(a)]

2. Emission Limits and Management Practices for Storage Tanks

Tanks D1, D3, D7, D8, and D9 are internal floating roof (IFR) gasoline storage tanks of capacity greater than 151 m³ (39,890 gallons) each. These tanks are subject to management practices in 40 C.F.R. Part 63, Subpart BBBBBB, Table 1. Gulf uses compliance option 2(b) to demonstrate compliance. Therefore, Tanks D1, D3, D7, D8, and D9 shall be equipped according to the requirements of 40 C.F.R. § 60.112b(a)(1) except for the secondary seal requirements under § 60.112(a)(1)(ii)(B) and the requirements in §§ 60.112b(a)(1)(iv) through (ix). [40 C.F.R. Part 63, Subpart BBBBBB, Table 1]

- a. Each IFR shall be equipped with either a liquid-mounted seal or a mechanical shoe seal. [40 C.F.R. § 60b.112(a)(1)(ii)]
- b. Each IFR shall float on the stored liquid surface at all times, except during intervals when the storage vessel is completely emptied or subsequently emptied and refilled. [40 C.F.R. § 60b.112(a)(1)(i)]
- c. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. [40 C.F.R. § 60b.112(a)(1)(i)]
- d. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents shall provide a projection below the liquid surface. [40 C.F.R. § 60b.112(a)(1)(iii)]

3. Emission Limits and Management Practices for the Loading Rack

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

- a. Gulf 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. Gulf 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 BPT standard of 10 mg/l of product transferred, and only the more stringent standard is included in the Order section of this license.

- c. Gulf 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. Gulf 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).

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

4. Testing Requirements

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

5. Continuous Monitoring System (CMS)

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

- a. Gulf shall install, calibrate, certify, operate, and maintain a CMS for the Vapor Recovery Unit (VRU). The CMS shall consist of a continuous emissions monitoring system (CEMS) installed in the exhaust air stream. Whenever gasoline vapors are displaced to the VRU, the CEMS shall be continuously operated pursuant to 40 C.F.R. §§ 63.8(c)(1)(ii) and (c)(2) (8). [40 C.F.R. § 63.11092(b)]
- b. Gulf shall determine an operating parameter value (VOC concentration) for the VOC CEMS based on engineering assessments and the manufacturer's recommendations and supplemented by previous test results. Gulf shall provide for the Department's approval the rationale for the selected operating parameter value, monitoring frequency, and averaging time, including data and calculations used to develop the value and description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the emission standard. [40 C.F.R. §§ 63.11092(b)(3) and (4)]

Note: Since the emission standard has been streamlined to the more stringent BPT standard of 10 mg/l of product loaded, the operating parameter value developed should be for this streamlined standard.

c. For any subsequent performance tests, Gulf shall document the reasons for any change in the operating parameter value since the previous performance test.
 [40 C.F.R. § 63.11092(c)]

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- d. Gulf shall not load gasoline into trucks when the VOC concentration exiting the VRU exceeds the operating parameter value developed as described above.
 [40 C.F.R. § 63.11092(d)(1)]
- e. The loading of gasoline into trucks when the VOC concentration exceeds the operating parameter value shall constitute a violation of the emission standard except as specified below. [40 C.F.R. § 63.11092(d)(3)]
- 6. Storage Tank Inspections

Gulf shall perform inspections of the IFR systems according to the requirements of 40 C.F.R. § 60.113b(a) as described below. [40 C.F.R. § 63.11092(e)(1)]

- a. At least once every 12 months, Gulf shall visually inspect the internal floating roof and the rim seal through manholes and roof hatches on the fixed roof. Any of the following conditions constitutes a failure in the integrity of the internal floating roof system.
 - (1) The internal floating roof is not resting on the surface of the product inside the tank;
 - (2) There is liquid accumulated on the roof;
 - (3) The seal is detached; or
 - (4) There are holes or tears in the seal fabric.

[40 C.F.R. § 60.113b(a)(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.

- b. If a failure is detected, as described in (a) above, Gulf shall repair the item(s) or empty and remove the storage vessel from service within 45 days. A 30-day extension may be requested from the Administrator. Such a request for extension must document that alternate storage capacity is unavailable and specify a schedule of actions Gulf will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 C.F.R. § 60.113b(a)(2)]
- c. Each time the IFR storage vessel is emptied and degassed, or at least every 10 years, Gulf shall visually inspect the IFR, seals, gaskets, slotted membranes, and sleeve seals (if any). If any of the following conditions are discovered during this inspection, Gulf shall repair the items as necessary so that none of the conditions exist before refilling.

(1) The IFR has defects;

- (2) If the seals have holes, tears, or other openings in the seal or seal fabric;
- (3) Gaskets no longer close off the liquid surfaces from the atmosphere; or

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- (4) The slotted membrane has more than 10% open area.
- [40 C.F.R. § 113b(a)(4)]
- 7. Equipment Leak Inspections

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

- a. Gulf 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(a)]
- 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)]
- 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 (5) calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within fifteen (15) calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within fifteen (15) days. Gulf 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(c) and (d)]
- 8. Recordkeeping for Storage Tanks

Gulf shall keep records of IFR inspections as specified in 40 C.F.R. § 60.115b. [40 C.F.R. § 63.11094(a)] The following information shall be included in the inspection records:

- (1) Identification of the storage vessel that was inspected;
- (2) The date of the inspection; and
- (3) The observed condition of each component of the control equipment (seals, IFR, and fittings).
- [40 C.F.R. § 60.115b(a)(2)]
- 9. Recordkeeping for Loading Rack

Gulf shall record and maintain the following records for the Loading Rack:

- a. Test certification for each gasoline cargo tank loading at the facility as specified in 40 C.F.R. §§ 63.11094(b) and (c).
- b. Descriptions of the types, identification numbers, and locations of all equipment in gasoline service. [40 C.F.R. § 63.11094(d)]

c. For each leak detected through inspection of equipment in gasoline service, Gulf shall record in the logbook the following information:

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- (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; and
- (7) The date of successful repair of the leak.
- [40 C.F.R. § 63.11094(e)]
- d. 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)]
- e. The occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment.
 [40 C.F.R. § 63.11094(g)(1)]
- f. Actions taken during periods of malfunction to minimize emissions pursuant to 40 C.F.R. § 63.11085(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 C.F.R. § 63.11094(g)(2)]
- 10. Notifications and Reports
 - a. Gulf has previously submitted an Initial Notification and a Notification of Compliance Status pursuant to 40 C.F.R. § 63.11093.
 - b. If any conditions that constitute a failure in the integrity of the internal floating roof system are detected during an inspection of an IFR, Gulf shall submit a report to the Department and EPA within 30 days of the inspection. The report shall identify the storage vessel, the nature of the defect(s), and the date the storage vessel was emptied or the nature of the repair and date the repair was made. [40 C.F.R. §§ 63.11095(a)(1) and 60.115b(a)(3)]
 - c. Gulf shall notify the Department at least 30 days before refilling the storage vessel following an internal inspection. If an inspection is unplanned and Gulf could not have known about the inspection 30 days in advance, then Gulf shall notify the Department at least seven (7) days before the refilling. 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 refilling the tank following an internal inspection. [40 C.F.R. §§ 63.11092(e)(1) and 60.113b(a)(5)]

- d. Gulf shall submit an excess emissions report to the Department and EPA at the time the semiannual compliance report is submitted. The excess emissions report shall include the following:
 - (1) Each instance of a non-vapor-tight gasoline cargo tank loading at the facility in which Gulf failed to take steps to assure that such cargo tank would not be reloaded at the facility before vapor tightness documentation for that cargo tank was obtained.
 - (2) Each reloading of a non-vapor-tight gasoline cargo tank at the facility before vapor tightness documentation for that cargo tank is obtained by the facility.
 - (3) Each failure to maintain the monitored operating parameter value for the VRU. The report shall include the monitoring data for the days for where the failure to maintain occurred and a description and timing of the steps taken to repair or perform maintenance on the vapor collection systems, VRU, or CMS.
 - (4) For each occurrence of an equipment leak for which no repair attempt was made within five (5) days or for which repair was not completed within fifteen (15) days after detection include the date on which the leak was detected, the date of each attempt to repair the leak, the reasons for the delay of repair, and the date of successful repair.
 - [40 C.F.R. § 63.11095(b)]
- e. Gulf shall submit a semiannual report to the Department and EPA including the number, duration, and a brief description of each type of malfunction which occurred during the reporting period and which caused, or may have caused, any applicable emission limitation to be exceeded. The report must also include a description of actions taken by Gulf to minimize emissions including actions taken to correct a malfunction. This report may be submitted as part of the semiannual compliance report. [40 C.F.R. § 63.11095(d)]

G. Product Distribution, Loading Rack, and Vapor Recovery Unit

Petroleum products handled at this facility are received by marine vessel and by truck and transferred via product piping to the terminal's tank farm. Final distribution of product is conducted primarily at the truck Loading Rack. The Loading Rack includes five lanes with six gasoline loading arms, seven distillate oil bottom loading arms, and one top loading distillate arm. It has a rated throughput of 7,600 gallons per minute (3,600 gal/min for gasoline, ethanol, and gasoline/ethanol blends and 4,000 gal/min for distillate oil, jet fuel, and kerosene).

Gulf has requested the ability to load marine vessels with distillate oil, jet fuel, or kerosene under a very limited set of circumstances as is described below.

1. Marine Vessel Loading

Gulf is contracted with the federal government to store distillate oil, jet fuel, and kerosene "reserves" that includes a requirement that the terminal be capable of loading

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marine vessels in the event that the federal government deems a need to release a portion of the reserves. Historically, such events have been very rare.

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Gulf has stated that the currently licensed throughput limits of 310 MM gallons of distillate oil and 150,000 gallons of jet fuel and kerosene are sufficient to be inclusive of throughput for both the Loading Rack and marine vessel loading. Further, marine vessel loading will only occur when Gulf is contractually obligated by its agreement with the federal government. There are no physical changes required to perform marine vessel loading since the existing lines and pumps can be used for this purpose. Emission factors for marine vessel loading of distillate oil are lower than for loading tanker trucks because the depth of the compartment being filled on a marine vessel results in less turbulence.

Changes that are modifications require a Best Available Control Technology (BACT) analysis. A modification is defined as a physical change or a change in the method of operation that results in an emissions increase of any regulated pollutant. Since Gulf is not proposing any increase in licensed product throughput, and the emission factors for marine vessel loading are lower than those for truck loading, this change is not considered a modification and BACT is not applicable.

The Department did consider Best Practical Treatment (BPT) for control of emissions from marine vessel loading. Use of the existing Vapor Recovery Unit is not technically feasible because large amounts of non-gasoline vapors could foul the carbon beds. Activation of the federal reserve contract is expected to be infrequent and for short periods of time, making permanent installation of new control equipment financially infeasible. Gulf may receive very short notice of contract activation, making finding an appropriate rental unit impractical. Therefore, BPT for marine vessel loading is determined to be limiting this operation to the loading of distillate oil, jet fuel, or kerosene and only conducting marine vessel loading when fulfilling obligations of Gulf's contract with the federal government. Gulf shall maintain records of the date, time, and duration of all marine vessel loading, documentation that the contract requirements were activated, and the product type and amount of all products loaded. Visible emissions from marine vessel loading shall not exceed 5% opacity on a sixminute block average basis.

National Emission Standards for Marine Tank Vessel Loading Operations, 40 C.F.R. Part 63, Subpart Y, is not applicable to marine vessel loading at Gulf. Since Gulf is considered an existing source with emissions less than 10 tpy of any single HAP and less than 25 tpy for all HAP combined, 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)] Additionally, this regulation does not apply to the loading of marine vessels with distillate oil. [40 C.F.R. § 63.560(d)(1)] There are no other applicable requirements.

2. Control Equipment

A Vapor Recovery Unit (VRU) is used to control emissions whenever gasoline is loaded or whenever a truck is loaded that carried gasoline as its most recent previous load. When the tank truck is loaded with liquid product, displaced vapors are transferred from the truck through a flexible hose and manifold to the vapor line and finally the VRU.

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The VRU is a McGill carbon adsorption unit, installed in 1995 to control emissions of VOC to 10 mg/l of product loaded or less. The VRU is a carbon adsorption/desorption system that consists of two upright beds containing carbon granules onto which gasoline vapors will adsorb.

The incoming vapors are adsorbed onto the surface of the carbon granules as each bed is brought online in alternating cycles. Using a timer controlled automatic valving sequence, the two beds alternate adsorb and desorb cycles.

The VRU's control system has three modes of operations; Continuous, Remote, and CEM start. In Continuous mode, the VRU is on at all times and cycles between the two carbon beds every 15 minutes. In Remote mode, the VRU comes online based on a signal from the loading rack and cycles between the two carbon beds every 15 minutes. After the last truck completes loading, the VRU cycles three additional times before shutting down. In CEM start mode, the VRU will exhaust to a single carbon bed until an emission set point is reached whereupon it is automatically swapped to the second carbon bed and the first carbon bed begins its regeneration cycle. After 15 minutes, if the second bed has not reached the emissions set point, the system will continue to regenerate the first bed for up to an additional 15 minutes and then shut down the regeneration and wait for the online carbon bed to reach the set point before swapping again. Although some modes are more energy efficient, all modes of operation are considered equivalent for emissions reduction and whichever mode Gulf operates in must continue to meet the applicable emissions standard.

While one bed is adsorbing, the other undergoes a deep vacuum desorption. During desorption, a vacuum is drawn on the bed being regenerated, which lowers the pressure in the chamber to below the vapor pressure of the adsorbed VOC. This causes the VOC to boil off from the adsorbent. The hydrocarbon-rich vapors released from the carbon bed are removed from the air stream by contacting them with a liquid gasoline mist. Liquid gasoline is then returned to storage.

3. Visible Emissions

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

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Visible emissions from the VRU shall not exceed 20% opacity on a six-minute block average basis. $[06-096 \text{ C.M.R. ch. } 101, \S 3(B)(4)]$

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

Visible emissions from the VRU shall not exceed 5% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

The BPT visible emission standard is more stringent than the applicable limits in 06-096 C.M.R. ch. 101. Therefore, the visible emission limit has been streamlined to the more stringent BPT limit, and only this more stringent limit shall be included in the Order of this air emission license.

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

Gulf 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. All displaced vapors and gases shall be vented to the VRU, 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. Gulf shall prevent liquid drainage from the loading device when it is not in use. [06-096 C.M.R. ch. 112, § 3(C)]
- 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. Gasoline shall not 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)]

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g. Emissions of VOC from the VRU shall not exceed 35 mg/l of gasoline transferred. [06-096 C.M.R. ch. 112, § 4(A)]

Note: This standard has been streamlined to the more stringent BPT standard of 10 mg/l of product transferred, and only the more stringent standard is included in the Order section of this license.

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

Gulf 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. Gulf 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 explosion 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), Gulf 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)]
- Petroleum Liquids Transfer Vapor Recovery at Bulk Gasoline Plants, 06-096 C.M.R. ch. 133

Gulf is not subject to the requirements of 06-096 C.M.R. ch. 133. This regulation applies to bulk gasoline plants, which are facilities with a daily throughput of gasoline

less than 4,000 gallons per month. Gulf's daily throughput categorizes this facility as a bulk gasoline terminal subject to the control requirements of *Bulk Terminal Petroleum Liquid Transfer Requirements*, 06-096 C.M.R. ch. 112, as described earlier.

7. 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.

- 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 VRU are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded. [40 C.F.R. § 60.502(b)]

Note: This standard has been streamlined to the more stringent BPT standard of 10 mg/l of product transferred, and only the more stringent standard is included in the Order section of this license.

- (3) The VRU 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 vaportight gasoline trucks using the procedures outlined in 40 C.F.R. § 60.502(e).
- (5) Gulf 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) Gulf 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 VRU, 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

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

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- (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 BBBBBB are determined to be at least as stringent as these NSPS requirements. Therefore, these Subpart XX requirements are streamlined to the Subpart BBBBBB requirements, and only the Subpart BBBBBB 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).
- 8. Best Practical Treatment (BPT)

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 and marine vessel loading:

- a. Any tank truck which has carried gasoline as the most recent previous load shall utilize the vapor collection system and VRU during the entire loading process.
- b. BPT for visible emissions from the VRU and marine vessel loading was discussed earlier in this license.
- c. Gulf is licensed to conduct marine vessel loading for distillate oil, jet fuel, and kerosene only. Gulf shall not conduct marine vessel loading of gasoline, ethanol, or gasoline/ethanol blends.
- d. Gulf shall only conduct marine vessel loading when contractually obligated by its agreement with the federal government. Compliance shall be demonstrated by maintaining records of the date, time, and duration of all marine vessel loading as well as documentation that the contract requirements were activated.

e. Gulf shall not exceed a petroleum product throughput for the Loading Rack and marine vessel loading (combined) as follows (based on a 12-month rolling total):

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Product	Throughput Limit
gasoline and gasoline/ethanol blends	330,000,000 gallons
ethanol	33,000,000 gallons
distillate oil	310,000,000 gallons
jet fuel/kerosene	150,000,000 gallons

Compliance shall be demonstrated by maintaining records of gallons of throughput for the Loading Rack and marine vessel loading for each product on a monthly and 12-month rolling total basis.

- f. The Loading Rack shall not exceed a product loading rate of gallons per minute (inclusive of all products). Compliance shall be demonstrated by maintaining records of the loading rack maximum design loading rate.
- g. Emissions of VOC from the VRU shall not exceed 10 mg/l of product loaded.

Compliance with this limit has historically been demonstrated through annual performance testing. Gulf has requested that the compliance method be changed to use of the existing VOC CEMS in accordance with 40 C.F.R. Part 63, Subpart BBBBBB.

Use of the VOC CEMS provides more frequent documentation of compliance with emission standards and will allow for more precise calculation of actual emissions. Therefore, the Department approves of this request. Compliance shall be demonstrated through use of a VOC CEMS operated and maintained in accordance with *Source Surveillance – Emissions Monitoring*, 06-096 C.M.R. ch. 117.

No later than 60 days from the issuance of this license, Gulf shall submit to the Department for approval documentation of the proposed operating parameter value (VOC concentration) equivalent to 10 mg/l based on engineering assessments and the manufacturer's recommendations and supplemented by previous test results.

The VRU control system shall be equipped with interlocks that provide an alarm to terminal staff if the VOC concentration exceeds 70% of the operating parameter value and that automatically cease gasoline loading if the VOC concentration exceeds 90% of the operating parameter value.

Departmental Findings of Fact and Order Air Emission License Renewal with Amendment

H. Internal Floating Roof Tanks

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

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Storage Tank	Date of Installation	Capacity (gallons)	Control Equipment
D1	1950	4,003,566	internal floating roof
D3	1950	3,828,552	internal floating roof
D7	1953	3,247,062	internal floating roof
D8	1954	5,985,840	internal floating roof
D9	1959	767,466	internal floating roof

All of the tanks above are also licensed to store distillate oil, jet fuel, and kerosene.

Gulf shall meet the following requirements for Tanks D1, D3, D7, D8, and D9 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. 115, BPT.

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

Gulf 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. These requirements shall be met regardless of the product stored. In cases where the IFR tank is not subject to 06-096 C.M.R. ch. 111 due to the product stored, the requirement is incorporated under 06-096 C.M.R. ch. 115, BPT.

- 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, § 2(A)(1)]
 - (2) The IFR and closure seal(s) are maintained such that there are no visible holes, tears, or other openings in the seal or between the seal and the floating roof; [06-096 C.M.R. ch. 111, § 2(A)(2)]
 - (3) All storage tank openings, except stub drains, are equipped with covers, lids, or seals that shall be closed at all times except when in actual use; [06-096 C.M.R. ch. 111, § 2(A)(3)(a)]
 - (4) Each automatic bleeder vent (vacuum breaker vent) is closed at all times, except when the roof is being floated off or being landed on the roof leg supports; [06-096 C.M.R. ch. 111, § 2(A)(3)(b)] and

- (5) Each rim vent is set to open only when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.
 [06-096 C.M.R. ch. 111, § 2(A)(3)(c)]
- b. Gulf 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, § 2(A)(4)] These monthly inspections are determined to be more stringent than the annual inspection required by 40 C.F.R. Part 63, Subpart BBBBBB. Therefore, these requirements have been streamlined, and only the more stringent monthly inspections shall be included in the Order section of this air emission license.
 - (2) Each IFR tank shall be completely emptied and degassed at least every 10 years. At such time, Gulf 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, § 2(A)(5)]
 - (3) Gulf shall not empty and degas any storage tank with a capacity greater than 39,000 gallons containing a petroleum liquid whose true vapor pressure is greater than 1.52 psia for the purpose of performing a complete inspection between June 1 and August 31 of each calendar year. [06-096 C.M.R. ch. 111, § 2(C)] This prohibition applies regardless of whether or not degassing emissions are controlled pursuant to 06-096 C.M.R. ch. 170, as addressed below.
- 2. Degassing of Petroleum Storage Tanks, Marine Vessels, and Transport Vessels, 06-096 C.M.R. ch. 170

Gulf 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. These requirements apply whenever the most recent previous product stored in the IFR tank was gasoline, ethanol, or a gasoline/ethanol blend.

- 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 Gulf 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. $[06-096 \text{ C.M.R. ch. } 170, \S 7(B)]$

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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. $[06-096 \text{ C.M.R. ch. } 170, \S 6]$

The monitoring device shall be calibrated, maintained, and operated according to the manufacturer's instructions. $[06-096 \text{ C.M.R. ch. } 170, \S 7(A)]$

- (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) Gulf 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 a 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, Gulf shall vent emissions from the vessel receiving the sludge (including vacuum trucks) 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]

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

Gulf 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) Gulf'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. New Source Performance Standards (NSPS)

All of Gulf's 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:

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- 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
- 4. Best Practical Treatment (BPT)

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 the IFR tanks:

- a. The IFR tanks are all dual storage tanks, which are equipped to store gasoline, ethanol, gasoline/ethanol blend, distillate oil, jet fuel, and kerosene. Gulf shall comply with all requirements of 06-096 C.M.R. ch. 111 applicable for the storage of gasoline regardless of the product stored. No notification to the Department is required when products are switched.
- b. Gulf shall not land the roof of a IFR tank, i.e., allow the roof to rest upon its support legs, unless:
 - (1) the most recently stored product was distillate oil, jet fuel, or kerosene; or
 - (2) 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; or
 - (3) the tank is subsequently degassed in accordance with 06-096 C.M.R. ch. 170; or
 - (4) Gulf is given written approval by the Department.

c. Gulf 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:

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

	Date of	Capacity	
Equipment	Installation	(gallons)	Control Equipment
D2	1950	3,995,040	fixed roof
D4	1950	2,205,042	fixed roof
D5	1950	3,983,490	fixed roof
D6	1950	3,992,268	fixed roof

1. New Source Performance Standards (NSPS)

All of Gulf's 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
- 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.

Departmental Findings of Fact and Order Air Emission License Renewal with Amendment

J. Facility-Wide Limits

Gulf is subject to the following facility-wide emission limits:

	Emission Limit
Pollutant	(tpy)
VOC	49.9
Total HAP	24.9
Any Single HAP	9.9

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The annual 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. 115, 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, Gulf 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.

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c. Product Distribution

Emissions from product distribution include emissions from the Loading Rack and from marine vessel loading. VOC and HAP emissions from the collected gases sent to the VRU shall be based on data from the VOC CEMS. Fugitive emissions from the Loading Rack shall be assumed to be 1.3% of the vapors displaced during loading.

Emissions from marine vessel loading shall be calculated in accordance with the methodology contained in the most current version of AP-42, Fifth Edition, Volume 1, Chapter 5.2, *Transportation and Marketing of Petroleum Liquids*.

d. Facility Piping

Operation of the facility's equipment will result in fugitive emissions of VOC and HAP from piping. Gulf 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

2. Recordkeeping Requirements

Gulf 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 product for each licensed petroleum storage tank;
- b. Monthly throughput of each product at the Loading Rack;
- c. Monthly throughput of each product loaded into a marine vessel;
- d. Equipment and product information necessary to calculate emissions from the petroleum storage tanks in accordance with AP-42, Chapter 7;

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

e. Process and product information necessary to calculate emissions from tank maintenance operations in accordance with AP-42, Chapter 7; and

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f. Equipment and product information necessary to calculate emissions from facility piping in accordance with EPA's *Protocol for Equipment Leak Emission Estimates*.

K. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a five-minute block average basis.

L. <u>Performance Test Protocol</u>

For any performance testing required by this license, Gulf shall submit to the Department for approval a performance test protocol, as outlined in the Department's Performance Testing Guidance, at least 30 days prior to the scheduled date of the performance test. [06-096 C.M.R. ch. 115, BPT]

The Department's Performance Testing Guidance is available online at: https://www.maine.gov/dep/air/emissions/testing.html

M. Emission Statements

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

- 1. The capacity of each licensed petroleum storage tank;
- 2. Monthly throughput for each product for each licensed petroleum storage tank;
- 3. Monthly throughput of each product at the Loading Rack;
- 4. Monthly throughput of each product loaded into a marine vessel;
- 5. Calculations of the annual facility-wide VOC and HAP emissions on a calendar year total basis; and
- 6. Hours each licensed emission unit was active or operating on a monthly basis.

In reporting year 2023 and every third year thereafter, Gulf shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. Gulf 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)]

Departmental Findings of Fact and Order Air Emission License Renewal with Amendment

N. 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 emission units are 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.

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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)

	VOC	Single HAP	Total HAP
Total TPY	49.9	9.9	24.9

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year
PM10	25
SO_2	50
NO _x	50
CO	250

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

This determination is based on information provided by the applicant regarding the expected construction and operation of the proposed emission units. If the Department determines that any parameter (e.g., stack size, configuration, flow rate, emission rates, nearby structures, etc.) deviates from what was included in the application, the Department may require Gulf to submit additional information and may require an ambient air quality impact analysis at that time.

Departmental Findings of Fact and Order Air Emission License Renewal with Amendment

ORDER

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

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

The Department hereby grants Air Emission License A-390-71-P-R/M subject to the following conditions.

<u>Severability</u>. 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 CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S. § 347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 C.M.R. ch. 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 C.M.R. ch. 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 C.M.R. ch. 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115]

(6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 115]

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- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 C.M.R. ch. 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 C.M.R. ch. 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 C.M.R. ch. 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 C.M.R. ch. 115]
- (11) 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 to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - 1. Within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - 2. Pursuant to any other requirement of this license to perform stack testing.
 - B. Install or make provisions to install test ports that meet the criteria of 40 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. 115]

(12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

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- A. Within thirty (30) days following receipt of the written test report by the Department, or another alternative timeframe approved by the Department, 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. 115]
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or license requirement. [06-096 C.M.R. ch. 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 C.M.R. ch. 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 C.M.R. ch. 115]

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(16) The licensee shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S. § 605). [06-096 C.M.R. ch. 115]

SPECIFIC CONDITIONS

(17) **Product Distribution, Loading Rack, and Vapor Recovery Unit**

A. Gulf shall not exceed the following petroleum product annual throughput totals for the Loading Rack and marine vessel loading combined (based on a 12-month rolling total):

Product	Throughput Limit
gasoline and gasoline/ethanol blends	330,000,000 gallons
ethanol	33,000,000 gallons
distillate oil	310,000,000 gallons
jet fuel/kerosene	150,000,000 gallons

Compliance shall be demonstrated by maintaining records of gallons of throughput for the Loading Rack and marine vessel loading for each product on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]

- B. Marine Vessel Loading
 - 1. Gulf is licensed to conduct marine vessel loading of distillate oil, jet fuel, and kerosene only. Gulf shall not conduct marine vessel loading of gasoline, ethanol, or gasoline/ethanol blends. [06-096 C.M.R. ch. 115, BPT]
 - 2. Gulf shall only conduct marine vessel loading when contractually obligated by its agreement with the federal government. Compliance shall be demonstrated by maintaining records of the date, time, and duration of all marine vessel loading as well as documentation that the contract requirements were activated. [06-096 C.M.R. ch. 115, BPT]
 - 3. Visible emissions from marine vessel loading shall not exceed 5% opacity on a sixminute block average basis. [06-096 C.M.R. ch. 115, BPT]
- C. The Loading Rack shall not exceed a product loading rate of 7,600 gallons per minute (inclusive of all products). Compliance shall be demonstrated by maintaining records of the loading rack maximum design loading rate. [06-096 C.M.R. ch. 115, BPT]
- D. Gulf shall not import, distribute, or offer for sale within the state of Maine any distillate oil to be used as a fuel unless the distillate oil has a sulfur content of 0.0015% by weight

or less. Compliance shall be demonstrated by maintaining records of the sulfur content of shipments received. [06-096 C.M.R. ch. 106, § 3(A)(2)]

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- E. Control Requirements
 - 1. The Loading Rack shall be equipped and maintained with a vapor collection system designed to collect 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 BBBBBB, Table 2]
 - 2. Any tank truck which carried gasoline as the most recent previous load shall utilize the vapor collection system and VRU during the entire loading process. [06-096 C.M.R. ch. 115, BPT]
 - Gulf 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. Gulf 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 BBBBBB, 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 BBBBBB, Table 2]
 - 6. Gulf 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. Gulf 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)]
 - 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)]

9. The vapor control system at the Loading Rack shall be designed and operated such that during loading operations:

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- 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 explosion 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, Gulf 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)]
- 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) and 06-096 C.M.R. ch. 112, § 3(E)]
- 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. Gulf shall prevent liquid drainage from the loading device when it is not in use. [06-096 C.M.R. ch. 112, § 3(C)]
- 14. Gasoline shall not 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)]
- F. Equipment Inspections

Each calendar month, the vapor collection system, the VRU, 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)]

G. Emission Limits

1. Emissions of VOC from the VRU shall not exceed 10 mg/l of product loaded. [06-096 C.M.R. ch. 115, BPT]

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Note: This standard has been streamlined with the standards contained in 06-096 C.M.R. ch. 112, § 4(A) and 40 C.F.R. Part 63, Subpart BBBBBB, Table 2, row 1(b). Only this more stringent standard is included in the Order section of this license.

- 2. Visible emissions from the VRU shall not exceed 5% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]
- H. Continuous Monitoring System
 - 1. Compliance with the VOC emission limit above shall be demonstrated through use of a VOC CEMS operated and maintained in accordance with 06-096 C.M.R. ch. 117. [06-096 C.M.R. ch. 115, BPT]
 - 2. Gulf shall install, calibrate, certify, operate, and maintain a CMS for the VRU. The CMS shall consist of a VOC CEMS installed in the exhaust air stream. Whenever gasoline vapors are displaced to the VRU, the CEMS shall be continuously operated pursuant to 40 C.F.R. §§ 63.8(c)(1)(ii) and (c)(2) (8). [40 C.F.R. § 63.11092(b)]
 - 3. No later than 60 days from the issuance of this license, Gulf shall determine an operating parameter value (VOC concentration) for the VOC CEMS equivalent to 10 mg/l based on engineering assessments and the manufacturer's recommendations and supplemented by previous test results. Gulf shall provide for the Department's approval the rationale for the selected operating parameter value, monitoring frequency, and averaging time, including data and calculations used to develop the value and description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the emission standard. [40 C.F.R. §§ 63.11092(b)(3) and (4) and 06-096 C.M.R. ch. 115, BPT]
 - For any subsequent performance tests, Gulf shall document the reasons for any change in the operating parameter value since the previous performance test. [40 C.F.R. § 63.11092(c)]
 - Gulf shall not load gasoline into trucks when the VOC concentration exiting the VRU exceeds the operating parameter value developed as described above.
 [40 C.F.R. § 63.11092(d)(1)]
 - 6. The loading of gasoline into trucks when the VOC concentration exceeds the operating parameter value shall constitute a violation of the emission standard except as specified below. [40 C.F.R. § 63.11092(d)(3)]

- 7. The VRU control system shall be equipped with interlocks that provide an alarm to terminal staff if the VOC concentration exceeds 70% of the operating parameter value and that automatically cease gasoline loading if the VOC concentration exceeds 90% of the operating parameter value. [06-096 C.M.R. ch. 115, BPT]
- I. Recordkeeping

Gulf shall record and maintain the following records for the Loading Rack and VRU:

- 1. Gallons of throughput at the loading rack for each product on a monthly and 12-month rolling total basis; [06-096 C.M.R. ch. 137]
- 2. Records of the test certification for each gasoline cargo tank loading at the facility pursuant to 40 C.F.R. §§ 63.11094(b) and (c);
- 3. Records describing the types, identification numbers, and locations of all equipment in gasoline service; [40 C.F.R. § 63.11094(d)]
- 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 leak detected through inspection of equipment in gasoline service, Gulf shall record in the logbook the following information:
 - 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(e) and 40 C.F.R. § 60.505(c)]
- 6. 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; [06-096 C.M.R. ch. 120, § 3(D)]
- 7. 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)]
- Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment;
 [40 C.F.R. § 63.11094(g)(1)]
- 9. Records of actions taken during periods of malfunction to minimize emissions pursuant to 40 C.F.R. §63.11085(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation; [40 C.F.R. § 63.11094(g)(2)] and

10. Records of any maintenance activities performed (planned or unplanned) on the VRU. [06-096 C.M.R. ch. 115, BPT]

(18) **Internal Floating Roof Tanks**

- A. The IFR tanks are dual storage tanks. These tanks are equipped to store gasoline, ethanol, gasoline/ethanol blend, distillate oil, jet fuel, or kerosene. Gulf shall comply with all requirements of 06-096 C.M.R. ch. 111 applicable for the storage of gasoline regardless of the product stored. No notification to the Department is required when products are switched. [06-096 C.M.R. ch. 115, BPT]
- B. All IFR tanks shall be equipped, maintained, and operated such that: [incorporated under 06-096 C.M.R. ch. 115, BPT for tanks storing distillate oil, jet fuel, and kerosene]
 - 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, § 2(A)(1) and 40 C.F.R. § 60.112(a)(1)(ii)]
 - 2. Each IFR shall float on the stored liquid surface at all times, except during intervals when the storage vessel is completely emptied or subsequently emptied and refilled. [40 C.F.R. §§ 63.11087(a) and 60b.112(a)(1)(i)]
 - The IFR and closure seal(s) are maintained such that there are no visible holes, tears, or other openings in the seal or between the seal and the floating roof; [06-096 C.M.R. ch. 111, § 2(A)(2)]
 - All storage tank openings, except stub drains, are equipped with covers, lids, or seals that shall be closed at all times except when in actual use; [06-096 C.M.R. ch. 111, § 2(A)(3)(a)]
 - Each automatic bleeder vent (vacuum breaker vent) is closed at all times, except when the roof is being floated off or being landed on the roof leg supports; [06-096 C.M.R. ch. 111, § 2(A)(3)(b)]
 - Each rim vent is set to open only when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. [06-096 C.M.R. ch. 111, § 2(A)(3)(c)]
 - 7. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents shall provide a projection below the liquid surface. [40 C.F.R. §§ 63.11087(a) and 60b.112(a)(1)(iii)]

8. Gulf shall not land the roof of a IFR tank, i.e., allow the roof to rest upon its support legs, unless:

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- a. the most recently stored product was distillate oil, jet fuel, or kerosene; or
- b. 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; or
- c. the tank is subsequently degassed in accordance with 06-096 C.M.R. ch. 170; or
- d. Gulf is given written approval by the Department.

[06-096 C.M.R. ch. 115, BPT]

- 9. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. [40 C.F.R. §§ 63.11087(a) and 60b.112(a)(1)(i)]
- C. Tank Degassing

Gulf 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. These requirements apply whenever the most recent previous product stored in the IFR tank was gasoline, ethanol, or a gasoline/ethanol blend.

- 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 a gasoline/ethanol blend, Gulf 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.

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- 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. Gulf 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 a 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, Gulf shall vent emissions from the vessel receiving the sludge (including vacuum trucks) 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 a gasoline/ethanol blend, Gulf 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 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, Gulf 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).

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4. Recordkeeping

Gulf 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. Gulf'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. Gulf 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. 115, BPT]
- D. Inspection Requirements

[incorporated under 06-096 C.M.R. ch. 115, BPT for tanks storing distillate oil, jet fuel, and kerosene]

- 1. Routine inspections of floating roofs shall be conducted through roof hatches once every month. [06-096 C.M.R. ch. 111, § 2(A)(4)] Any of the following conditions constitutes a failure in the integrity of the internal floating roof system.
 - a. The internal floating roof is not resting on the surface of the product inside the tank;
 - b. There is liquid accumulated on the roof;

- c. The seal is detached; or
- d. There are holes or tears in the seal fabric.

[40 C.F.R. §§ 63.11092(e)(1) and 60.113b(a)(2)]

2. If a failure is detected, as described in (1) above, Gulf shall repair the item(s) or empty and remove the storage vessel from service within 45 days. A 30-day extension may be requested from the Administrator. Such a request for extension must document that alternate storage capacity is unavailable and specify a schedule of actions Gulf will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 C.F.R. §§ 63.11092(e)(1) and 60.113b(a)(2)]

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- 3. Each time a IFR tank is completely emptied and degassed, or every 10 years, whichever occurs first, Gulf shall perform an inspection by visually inspecting the floating roof deck, deck fittings, seals, gaskets, and slotted membranes from within the storage vessel. [40 C.F.R. §§ 63.11092(e)(1) and 60.113b(a)(4) and 06-096 C.M.R. ch. 111, § 2(A)(5)]
- 4. If any of the following conditions are discovered during the inspection described in (3) above, Gulf shall repair the items as necessary so that none of the conditions exist before refilling.
 - a. The IFR has defects;
 - b. If the seals have holes, tears, or other openings in the seal or seal fabric;
 - c. Gaskets no longer close off the liquid surfaces from the atmosphere; or
 - d. The slotted membrane has more than 10% open area.
 - [40 C.F.R. §§ 63.11092(e)(1) and 60.113b(a)(4)]
- 5. Gulf shall notify the Department at least 30 days before refilling the storage vessel following an internal inspection. If an inspection is unplanned and Gulf could not have known about the inspection 30 days in advance, then Gulf shall notify the Department at least seven (7) days before the refilling. 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 refilling the tank following an internal inspection. [40 C.F.R. §§ 63.11092(e)(1) and 60.113b(a)(5)]
- 6. Gulf shall not empty and degas any storage tank with a capacity greater than 39,000 gallons containing a petroleum liquid whose true vapor pressure is greater than 1.52 psia for the purpose of performing a complete inspection between June 1 and August 31 of each calendar year. [06-096 C.M.R. ch. 111, § 2(C)] This prohibition applies regardless of whether or not degassing emissions are controlled pursuant to 06-096 C.M.R. ch. 170.

E. Recordkeeping

Gulf shall record and maintain the following records for the IFR tanks:

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- 1. Product stored and throughput for each tank on a monthly basis; [06-096 C.M.R. ch. 137]
- 2. IFR inspections as specified in 40 C.F.R. § 60.115b. [40 C.F.R. § 63.11094(a)] The following information shall be included in the inspection records:
 - a. Identification of the storage vessel that was inspected;
 - b. The date of the inspection; and
 - c. The observed condition of each component of the control equipment (seals, IFR, and fittings).
 - [40 C.F.R. § 60.115b(a)(2)]
- 3. 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. 115, BPT]

(19) 40 C.F.R. Part 63, Subpart BBBBBB

Following are applicable requirements of 40 C.F.R. Part 63, Subpart BBBBBB not addressed elsewhere in this Order:

- A. Gulf 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.
 [40 C.F.R. § 63.11085(a)]
- B. Equipment Leak Inspections
 - 1. Gulf 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(a)]
 - 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)]
 - 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 (5) calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within fifteen (15) calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within fifteen (15) days. Gulf 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(c) and (d)]

C. Reports

- 1. If any conditions that constitute a failure in the integrity of the internal floating roof system are detected during an inspection of an IFR, Gulf shall submit a report to the Department and EPA within 30 days of the inspection. The report shall identify the storage vessel, the nature of the defect(s), and the date the storage vessel was emptied or the nature of the repair and date the repair was made. [40 C.F.R. § 63.11095(a)(1) and § 60.115b(a)(3)]
- 2. Gulf shall submit an excess emissions report to the Department and EPA at the time the semiannual compliance report is submitted. The excess emissions report shall include the following:
 - a. Each instance of a non-vapor-tight gasoline cargo tank loading at the facility in which Gulf failed to take steps to assure that such cargo tank would not be reloaded at the facility before vapor tightness documentation for that cargo tank was obtained.
 - b. Each reloading of a non-vapor-tight gasoline cargo tank at the facility before vapor tightness documentation for that cargo tank is obtained by the facility.
 - c. Each failure to maintain the monitored operating parameter value for the VRU. The report shall include the monitoring data for the days for where the failure to maintain occurred and a description and timing of the steps taken to repair or perform maintenance on the vapor collection systems, VRU, or CMS.
 - d. For each occurrence of an equipment leak for which no repair attempt was made within five (5) days or for which repair was not completed within fifteen (15) days after detection include the date on which the leak was detected, the date of each attempt to repair the leak the reasons for the delay of repair, and the date of successful repair.

[40 C.F.R. § 63.11095(b)]

3. Gulf shall submit a semiannual report to the Department and EPA including the number, duration, and a brief description of each type of malfunction which occurred during the reporting period and which caused, or may have caused, any applicable emission limitation to be exceeded. The report must also include a description of actions taken by Gulf to minimize emissions including actions taken to correct a malfunction. This report may be submitted as part of the semiannual compliance report. [40 C.F.R. § 63.11095(d)]

Departmental Findings of Fact and Order Air Emission License Renewal with Amendment

(20) **Fixed Roof Tanks**

Gulf shall maintain records of the products stored and throughput on a monthly basis for each fixed roof tank. [06-096 C.M.R. ch. 137]

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(21) Facility-Wide Limits

[06-096 C.M.R. ch. 115, BPT]

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

	Emission Limit	
Pollutant	(tpy)	
VOC	49.9	
Total HAP	24.9	
Any Single HAP	9.9	

- B. 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.
- C. Compliance with the facility-wide annual HAP emission limits 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.
- D. Gulf 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.
- E. Actual emissions shall be calculated as follows with all emissions summed to provide an annual total:
 - 1. Petroleum Storage Tanks

Annual 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.

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3. Facility Piping

Gulf 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. Product Distribution
 - a. Fugitive emissions from the Loading Rack shall be assumed to be 1.3% of the vapors displaced during loading.
 - b. Emissions of VOC and HAP from the collected gases sent to the VRU shall be based on data from the VOC CEMS.
 - c. Emissions from marine vessel loading shall be calculated in accordance with the methodology contained in the most current version of AP-42, Fifth Edition, Volume 1, Chapter 5.2, *Transportation and Marketing of Petroleum Liquids*
- F. Gulf 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:
 - 1. Monthly throughput for each product for each licensed petroleum storage tank;
 - 2. Monthly throughput of each product at the Loading Rack;
 - 3. Monthly throughput of each product loaded into a marine vessel;
 - 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*.

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

(22) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a five-minute block average basis. [06-096 C.M.R. ch. 101, § 3(C)]

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(23) **Performance Test Protocol**

For any performance testing required by this license, Gulf shall submit to the Department for approval a performance test protocol, as outlined in the Department's Performance Testing Guidance, at least 30 days prior to the scheduled date of the performance test. [06-096 C.M.R. ch. 115, BPT]

(24) Annual Emission Statements

- A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, Gulf 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. Gulf shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:
 - 1. The capacity of each licensed petroleum storage tank;
 - 2. Monthly throughput for each product for each licensed petroleum storage tank;
 - 3. Monthly throughput of each product at the Loading Rack;
 - 4. Monthly throughput of each product loaded into a marine vessel;
 - 5. Calculations of the annual facility-wide VOC and HAP emissions on a calendar year total basis; and
 - 6. Hours each licensed emission unit was active or operating on a monthly basis. [06-096 C.M.R. ch. 137]

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C. In reporting year 2023 and every third year thereafter, Gulf shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). Gulf 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)]

DONE AND DATED IN AUGUSTA, MAINE THIS 22nd DAY OF FEBRUARY, 2023.

DEPARTMENT OF ENVIRONMENTAL PROTECTION BY: for MELANIE LOYZIM, COMMISSIONER

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

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application:9/8/2022Date of application acceptance:9/14/2022

Date filed with the Board of Environmental Protection:

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

FILED

FEB 22, 2023

State of Maine Board of Environmental Protection